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ABSTRACT

This teaching resource presents a historical perspective of the alphabet which encompasses a study of major contributions by: (1) "Prehistoric People"; (2) "The Sumerians"; (3) "The Egyptians"; (4) "The Chinese"; (5) "The Greeks"; and (6) "The Romans." Background information, vocabulary study, student activities, a letter history, and a bibliography are included. Reproducible student sheets, discussion questions, unit goals, and taxonomies of affective and cognitive objectives are given. The guide concludes with a listing of letter origins, a glossary, and bibliographies of general resources for teachers and students. (MM)

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AlphaBetics

a history of our Alphabet

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AlphaBetics

a history of our Alphabet

A Source Guide for Self-Directed Units

by Sally J. Patton

1390

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ALPHABETICS
Sally J. Patton, author.

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Patton Pending books are a series of learning centers in books. The contents come from the workshops and teaching experiences of Sally Patton, educator extraordinaire. Her years of working with and for gifted students result in books that promote thinking on topics worth thinking about. These books are dedicated to growing, creative teachers everywhere!

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Illustrations by Kathleen Koopman

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FOREWORD

Do you remember learning your ABCs? Did you ever give any thought to the history of the letters? How we take these letters for granted! We move the 26 symbols around like pawns to form every word that we use in the English language. Yet our knowledge about their development is very limited.

One day I was visiting a classroom at an elementary school when a young student stopped me. "I have a question for you," he said. "Who made this letter look like this?" He was pointing to the letter "S." And from that inquisitive, provocative question, the idea for *Alphabetics, A History of Our Alphabet* was conceived. From that moment, research, reading, writing, re-researching, rewriting, and sudorific efforts ensued.

The content is designed for you, the educator, to convey to students the excitement and the miracle of discovery that are generated in this study of the development of a tool of communication, our alphabet.

Alphabetics is a historical perspective of our alphabet. It encompasses the study of the alphabet's major contributors: prehistoric people, the Sumerians, the Egyptians, the Chinese, the Greeks, and the Romans.

Background information, vocabulary study, and a history of each letter are included. For a learning-center approach, task cards are provided that are correlated to Bloom's Taxonomy of Cognitive Objectives.

Each letter in the alphabet has a very personal and unique quality. Each individual has a very personal and unique quality.

As you experience the dimensions of *Alphabetics*, you will have an opportunity to discover the relationship between the person and the letters of our alphabet.

1390

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TO THE TEACHER

Alphabetics is a learning center within a book. The first part of the book gives you, the teacher, in-depth background information on the subject itself as well as on each of the cultures to be studied. A generous bibliography gives easy access to rich resources for your classroom. We hope you'll add to this list resources of your own: posters, music, filmstrips, and artifacts that will excite your students about culture and writing. Designate a special section of the classroom with chairs, tables, the resources, and bulletin boards and give ample time for browsing.

Several student activities are included for each of the cultures. Reproduce the activities, then cut each one out separately. Glue each activity onto a piece of colored tagboard that has been cut either in the shape provided or in a shape of your choice. Your students can create the pattern shape.

You decide how many of the activities each student should complete, then let the students select their own based on their interest and enthusiasm. A real value for the students is to have the opportunity to read and consider all the activities and then choose their own. They will learn as they read and perhaps find a new interest or direction to pursue.

Effective Use of ALPHABETICS

This book contains a wealth of information that you and your students can draw on, as well as a variety of activities to facilitate student learning. As with any method or the use of any tool, the end result or product depends on correct and careful use. These pages are designed to help teachers enhance and facilitate students' learning. The following are offered to this end:

1. Review the activities provided to check for skills that need to be taught before beginning the unit. For example, many students do not know how to evaluate according to criteria. Therefore, the teacher's task is to provide information and practice in developing criteria and using them to evaluate ideas. Rank ordering and providing reasons to support the order may be new to students; comparing and contrasting, which requires finding similarities *and* differences, may also need to be taught.

2. The purpose of the activities is to require students to process information, or to use the higher levels of thinking. A knowledge base is critical to higher-level thinking, and the teacher must establish that students have sufficient information on the topic before they choose activities.

3. The activities in this book are based on Bloom's Taxonomy of Cognitive Objectives and Krathwohl's Taxonomy of Affective Objectives, which are hierarchical models. A hierarchical model of thinking requires a sequential movement through the steps, as each level builds on the preceding one. While disagreement exists regarding whether evaluation requires a higher level of thinking than synthesis, students must recall, understand, and be able to apply and analyze information and concepts before they can engage in synthesis or evaluative thinking. Requiring students to complete a task at each level is not necessary if the teacher employs some means to ensure the existence of the necessary depth of understanding.

4. Evaluation of student learning, progress, and products is important. Such evaluation should provide the student, teacher, administrator, and parent with information about the learning that is occurring. One way to evaluate is for the teacher to develop general criteria for all students, based on district and program goals, and allow each student to develop (usually in conjunction with teacher and perhaps parent input) specific criteria that he or she wants to have included in the evaluation. When possible, the evaluation should include persons in addition to the teacher and student. Other school personnel or community members may be appropriate for the evaluation of some products.

5. A synthesis of each topic covered in this book is provided, and may be used as background information for the teacher and/or students. Gathering an abundance of other resources is critical to the success of this book. Students need the experience of gathering information from a variety of sources, especially if the sources differ in viewpoint or even in "facts" presented.

6. At the end of each section is a list of suggested vocabulary items that have appeared in bold type in the text. Have students look up and write the definitions of the words and use them in the context in which they are used in the text. A glossary of all words appears in the back of the book.

7. Many of the tasks and suggested products herein are oriented toward verbal expression. Encourage students to find other ways to illustrate their ideas or what they've learned, ways that reflect their personal learning styles or modes of expression. Additionally, encourage them to use a variety of media to express themselves and to be (or become) risk-takers in occasionally choosing the unfamiliar.

Good Luck— may you and your students learn and grow from the use of these materials!

GUIDING QUESTIONS

As guides to major concepts from the social sciences, the following questions may be interspersed throughout the study of *Alphabetics* to encourage a broad pursuit of ideas on the topic. You, the teacher, or you and your students together, may choose various areas of focus for investigation, discovery, and discussion.

Although *Alphabetics* is concerned primarily with *written* communication, the questions below focus on communication in general. In most cases you may simply insert the word "written" if you wish to emphasize written communication as opposed to general communication when discussing these topics.

PHYSICAL GEOGRAPHY

1. How have differences in climate affected communication among people in one culture? Among cultures?
2. How has communication been adapted and modified in response to problems presented by climatic conditions?
3. What other physical conditions of the land have limited or helped communication among people in one culture? Among cultures?

CULTURAL GEOGRAPHY

1. How have social and societal patterns in a culture's environment affected communication?
2. In what ways has the political environment modified communication in each culture? Among cultures?
3. In what parts of the world have been found economic, social, and political factors that have *increased* communication among people?
4. In what areas have conditions been such that communication has been greatly *inhibited*?

HISTORY

1. Why have changes and improvements in communication taken place more rapidly in certain periods of history?
2. What has contributed to the inhibition or delay of progress in communication in other periods of history?
3. Predict various means of communication in the future.
4. What may be the effects of a cultural heritage on various kinds of communication?
5. What specifically would early cultures have needed to communicate about? Later cultures?
6. How would you collect, specify, analyze, and interpret data related to any of the previous questions?

POLITICAL SCIENCE

1. What has been the importance of the state or the nation in the development of a particular means of communication?
2. How has a particular country's philosophy of government affected the development of communication in that country?
3. What are the conditions under which civilization produces larger measures of freedom to foster communication?
4. In what ways does democracy foster communication among citizens? Among countries?

ECONOMICS

1. How has the ability to communicate contributed to the economic welfare and economic progress of society?
2. Does competition foster or inhibit the ability for people to communicate?
3. Compare and contrast the standard of living with communication in a variety of countries.

ANTHROPOLOGY

1. What is some of the earliest evidence of people's ability to adapt and adjust to their natural environment? Of their attempts to change it?
2. What would the role of communication have been in the above?
3. What opportunities and problems regarding communication needed resolution in the history of cultures? Today?
4. What basic changes in communication will people make in the next 100 years?
5. What are some of the problems that people must resolve to promote the welfare of mankind and mutual respect for various cultural patterns?

PSYCHOLOGY

1. What would it be like to live in isolation from other people and not be able to communicate with anyone else?
2. Do some people need to communicate more than others? Why?
3. What does it mean to "communicate well" with someone?

PHILOSOPHY

1. What is communication?
2. How do logic and emotions influence communication?
3. What has appeared to be the role of ideals, ethics, and moral values in the development of communication?

SOCIOLOGY

1. What are the means of written communication in our society today? Are some more effective than others? Which, and why?
2. What are some of the advantages of written communication? Drawbacks?
3. What may be some of the effects of social class on communication?
4. How do people in one culture communicate with people in another culture?
5. Do members of some societies communicate more among themselves than others? Why?
6. Do such societies adapt and progress more rapidly than others? How?

Adapted from Catherine B. Bruch, *Curriculum Guide for Teaching Gifted Children Social Sciences in Grades 4–6,* prepared for the Division of Special Education, California State Department of Education, 1970.

GOALS OF THE UNIT

The student will:

- Understand the origins of our alphabet.
- Trace the history of each of the 26 letters used in the English language.
- Recognize the importance of writing as a primary tool of communication.
- Study the role of the major cultures that contributed to the development of our alphabet.
- Relate the progress of a culture to the proliferation of writing that it has produced.
- Experience the infusion of the arts into the study of alphabetics.
- Investigate and explore other alphabets of the world.

TAXONOMY OF AFFECTIVE OBJECTIVES

RECEIVING	STUDENTS ARE WILLING TO BE AWARE OF AN EVENT AND TO PAY ATTENTION TO IT.
RESPONDING	STUDENTS REACT TO AN EVENT THROUGH SOME FORM OF PARTICIPATION.
VALUING	THE EVENT HAS VALUE TO STUDENTS AND THEY TREAT IT AS A BELIEF OR WITH A POSITIVE ATTITUDE.
ORGANIZATION	AS STUDENTS ENCOUNTER SITUATIONS FOR WHICH MORE THAN ONE VALUE IS RELEVANT, THEY ORGANIZE THE VALUES, DETERMINE THE INTERRELATIONS, AND ACCEPT SOME AS DOMINANT.
CHARACTERIZATION	STUDENTS CONSISTENTLY ACT IN ACCORDANCE WITH THE VALUES THEY ACCEPT AND THIS BEHAVIOR BECOMES A PART OF THEIR PERSONALITIES.

David R. Krathwohl and others, *Taxonomy of Educational Objectives, Handbook II: Affective Domain* **(New York: David McKay Company, 1964).**

TAXONOMY OF COGNITIVE OBJECTIVES

KNOWLEDGE	LEARNING THE INFORMATION
COMPREHENSION	UNDERSTANDING THE INFORMATION
APPLICATION	USING THE INFORMATION
ANALYSIS	EXAMINING SPECIFIC PARTS OF THE INFORMATION
SYNTHESIS	DOING SOMETHING NEW AND DIFFERENT WITH THE INFORMATION
EVALUATION	JUDGING THE INFORMATION

Benjamin S. Bloom and others, *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain* **(New York: David McKay Company, 1956).**

To help you determine the level at which a student is functioning according to Bloom's Taxonomy of Cognitive Objectives, here are some questions you might ask:

KNOWLEDGE
1. Is the student familiar with the basic concepts of this unit?
2. Does the student know fundamental methods of obtaining relevant information?

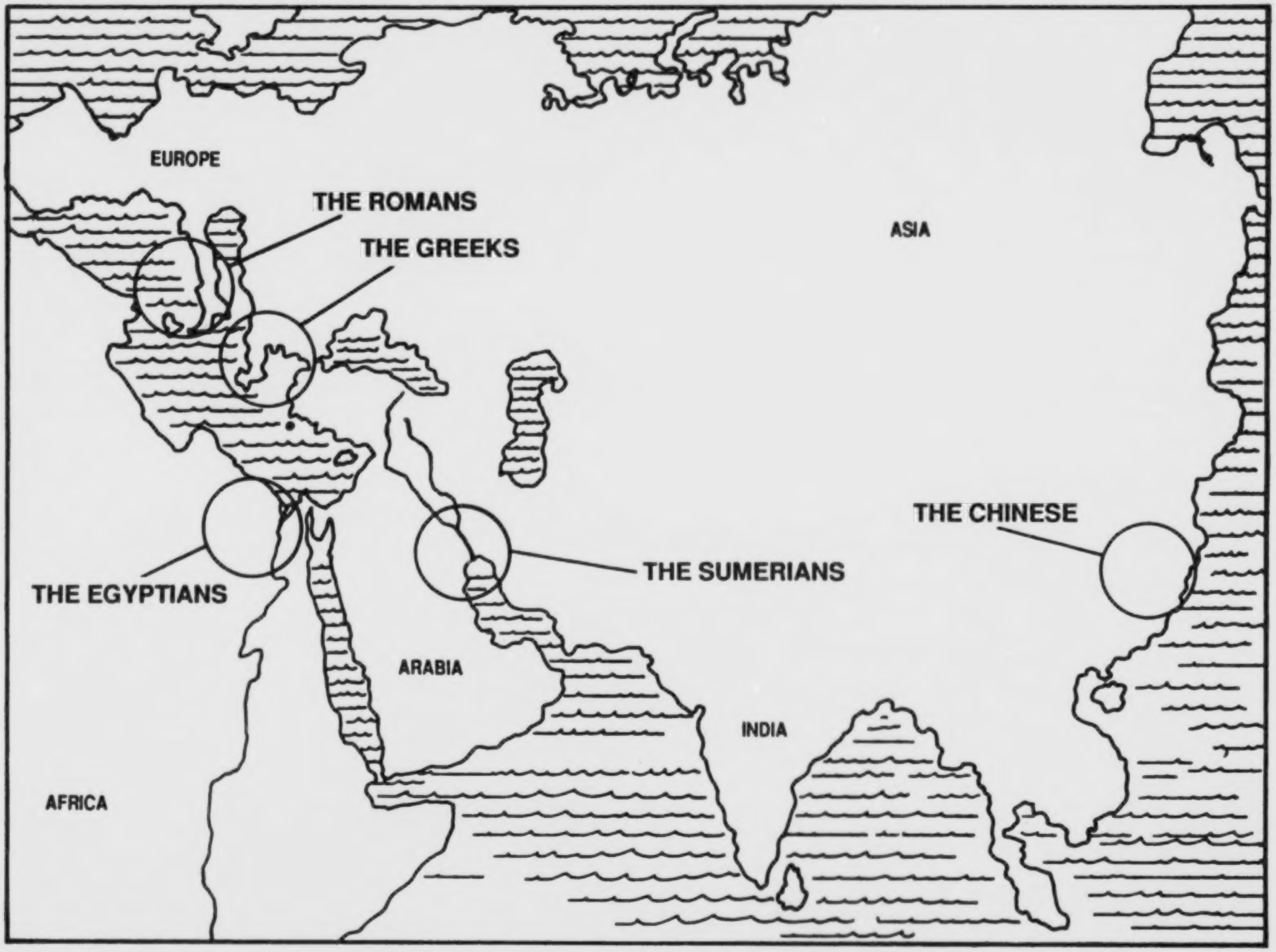
COMPREHENSION
1. Can the student condense complex ideas?
2. Can the student extrapolate important elements of information?

APPLICATION
1. Can the student present the concepts in a concrete form (i.e., book report, mobile, etc.)?
2. Can the student use relevant information to determine outcomes?

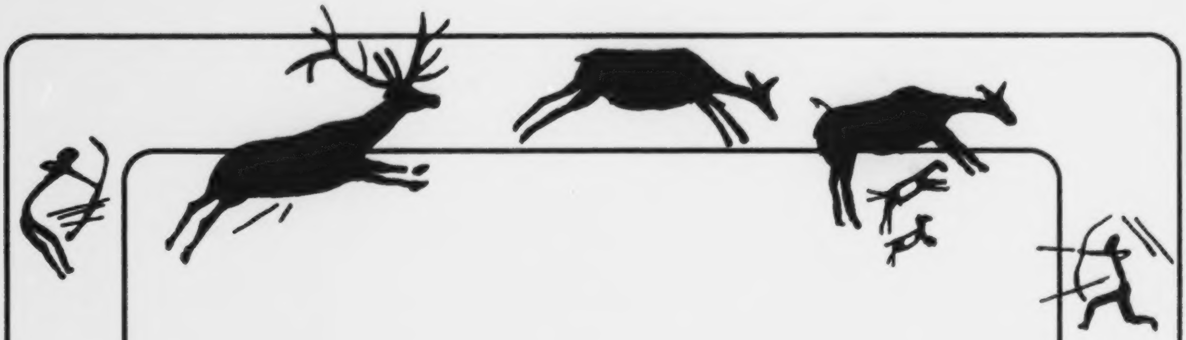
ANALYSIS
1. Does the student recognize the components of an idea or concept?
2. Does the student understand the interrelationship of the parts to the whole?

SYNTHESIS
1. Can the student create innovative or unique concepts or ideas related to the unit?
2. Does the student evidence "risk-taking"?

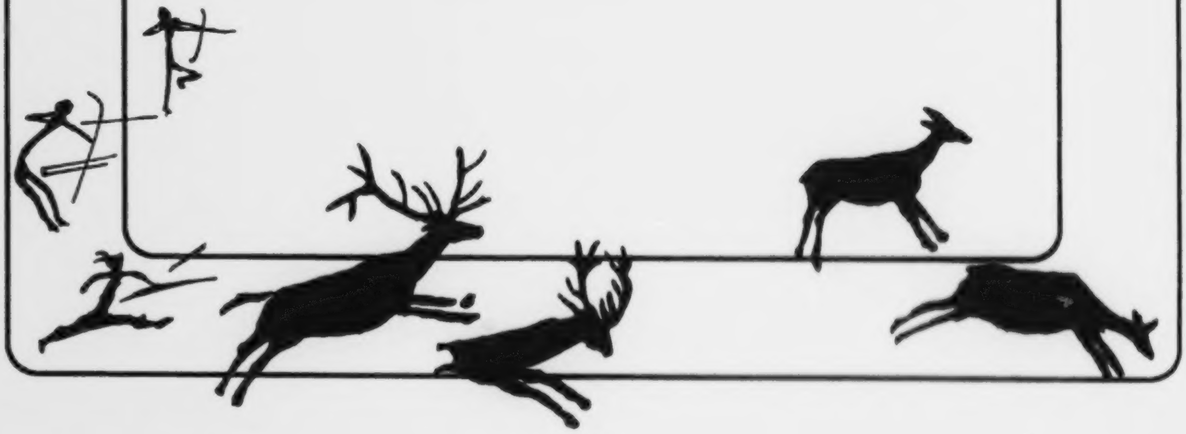
EVALUATION
1. Can the student associate past events with the present and the future?
2. Can the student differentiate between facts and assumptions?


EUROPE
THE ROMANS
THE GREEKS
ASIA
THE CHINESE
THE SUMERIANS
THE EGYPTIANS
ARABIA
INDIA
AFRICA

ORIGINS OF PEOPLE AND THEIR ALPHABETS



PREHISTORIC PEOPLE



We will start our history of the alphabet with the Stone Age people, who lived in the Upper **Paleolithic** period. *Paleo* means "ancient" in Greek, and *lithic* translates into "stone." These people lived in caves and used only chipped stone for their tools. **Paleontologists** have called these people Cro-Magnon man. This is another name for **Homo sapiens** man, who lived between 40,000 and 10,000 B.C.

These people discovered that the chipped stone could be used to record the events that related to their daily lives. Using a chisel-pointed stone, the people scratched pictures into the walls of their caves. The recorded pictures were portraits of animals. Because Cro-Magnons hunted and killed large animals such as bison, deer, and mammoths, their early pictures were of these animals. However, this was not the only art that the prehistoric people painted in their caves. As time passed, pictures of people began to emerge on the cave walls. There were scratched drawings of human hands and weird, swirling patterns. By holding a hand against the wall of the cave and then blowing paint through a bone tube or a reed, the people created an outline of the hand. The outline was in red or black. The swirling patterns were formed by people moving their fingers through the wet paint on the cave walls. The designs were in curves, circles, and long, straight lines. Possibly they were drawn just for amusement.

Where did the colors for this paint come from? Most of the paint colors came from the earth. Colorful rocks were selected and ground to a powder. Then this powder was mixed with the fat from animals. This pasty mixture was stored in large seashells. The dominant colors used were red, brown, black, orange, and yellow. **Ochre** was another source for paint. The people smeared the paint on the walls with their fingers or a wadded piece of fur.

Cave paintings were first discovered by the five-year-old daughter of the Marquis de Sautola. The Marquis de Sautola lived in Spain during the early 1900s. He was interested in **archeology** and decided to study it on his own.

While digging he discovered an ancient camping place, evidenced by some tools and flint spear tips. He knew that there must be an adjacent cave. After clearing the area, he located the entrance to the cave. He literally crawled through the low opening. The interior was very dark. As he groped his way holding a candle, he caught sight of the red and black paintings on the cave walls. He was overcome with amazement and wonder at these paintings of huge, strange animals. Meanwhile his young daughter, who had accompanied him, grew impatient watching her father digging. She wanted to explore, too. Her father gave her a candle and cautioned her to be careful. She wandered off into the monstrous cave. Soon she ran out shouting, "Toros, Toros!" Bulls, Bulls! Her father accompanied her to see what she had discovered. Enormous paintings of bison surrounded them. They were on the walls and the ceilings. Their colors were intense and luminous. The paintings that were discovered that day in Altamira, Spain, were later determined to be about 20,000 years old.

Other paintings were found in caves in France and Italy. These were also hidden deep inside caverns. Paintings and carvings etched by prehistoric people on stone have been found on all continents of the world. These drawings or paintings are called **pictographs**.

In Europe, the cave paintings are in deep caverns where there is no natural light. **Speculation** is that they were not painted merely for decoration. Scientists theorize that the pictographs had a magical or religious purpose. Perhaps the people felt that they could gain power over the animals by drawing pictures of them. Maybe they were paying respect to the animals they killed for their food. There have been many questions about cave paintings. **Anthropologists** suggest that the caves once had easy access where the paintings could be seen. But over the thousands of years the entrances have been blocked.

Among the prehistoric people were talented artists. Their realistic paintings of wild beasts evidenced their artistry. These talented people began to paint picture stories. A familiar story in the Stone Age was the picture of a hunting party. A series of related events and incidents of the hunt depicted step-by-step action. These are picture stories. An added dimension to indicate 10 men would be to draw a man with 10 marks underneath him. But how did these people convey abstract concepts and feelings? There now was a need for idea-pictures. These are called **ideographs**. For example, a broken arrow would symbolize the idea of peace.

Let's consider the paintings of the prehistoric people a form of iconography. This is known as a primitive representation of thoughts, but not definite ideas. To be sure, the Stone Age people left a rich treasure of unsigned murals for you and for generations to follow.

Vocabulary

Paleolithic
paleontologists
Homo sapiens
ochre
archeology
pictographs
speculation
anthropologists
ideographs

Man appeared as a rational being some 12,000 years ago. His intelligent brain conceived ideas that distinguished him from animals.

Prehistoric man was inarticulate because of his massive jaw and thick lips. Thus, he turned to picture writing to convey ideas. He recorded his conquests of beasts in his cave and on fragments of rocks. Dots, circles, curves, and lines were added to this picture writing.

In time, descendants of the cave men used their inherited skill to relate stories with pictures. These stories described tribal events.

Thus occurred the beginning of writing: a series of related pictures depicting animals, people, and daily life.

ACTIVITIES

PREHISTORIC PEOPLE
Knowledge—What do we call the writing of prehistoric people? Develop a list of words related to prehistoric writing.

PREHISTORIC PEOPLE
Knowledge—List some of the animals depicted in the writing or messages of prehistoric people. Which animals appear most frequently? Why might this be so?

PREHISTORIC PEOPLE
Comprehension—Define the following terms: anthropologist, archeologist, Stone Age, paleolithic, petroglyphs, hieroglyphs, neolithic. Explain the role of each in the study of early people.

PREHISTORIC PEOPLE
Comprehension—What tools did prehistoric people use to write? How was each tool used?

PREHISTORIC PEOPLE
Application—Pin a large piece of paper to the wall. Draw a cave painting and message. Prepare an explanation of where, when, and why this painting and message would have been created.

PREHISTORIC PEOPLE
Application—Make a mobile of prehistoric animals. Explain the role of each in the life of prehistoric people or the prehistoric environment.

PREHISTORIC PEOPLE
Analysis—On a chart, show the development of early man from hominid to Homo sapiens. Illustrate with pictures. Check *National Geographic* magazine and at least three other sources for information.

PREHISTORIC PEOPLE
Analysis—Compare and contrast the lives of two early peoples. Include their shelter, probable diet, ways of writing, and other interesting information. Share the similarities and differences through a play, dioramas, or a medium of your choice.

PREHISTORIC PEOPLE
Synthesis—Based on information you have collected in this unit, write a story of prehistoric times or people. Be creative, but base your creativity on fact!

PREHISTORIC PEOPLE
Synthesis—Role play . . . A Day in the Life of a Prehistoric Person. Use ideas of your own, but include information you have learned during this unit of study.

PREHISTORIC PEOPLE
Evaluation—What advantages and disadvantages did prehistoric people have in relationship to their environment? Compare these advantages and disadvantages with those of modern people.

PREHISTORIC PEOPLE
Evaluation—Develop a list of the changes in humans from hominid to Homo sapiens. Rate the importance of each change on a scale of 1 to 10, with 10 being "very important." Explain the reasons for each rating.

BIBLIOGRAPHY

PRIMARY LEVEL

Crowell, Pers. *King Moo, the Wordmaker*. Caldwell, ID: Caxton Printers, Ltd.

Horner, Deborah Ruth. *Creature Paws and Jaws*. New York: Charles Scribner's Sons.

Oram, Sandie. *Stone Age Man*. MacDonald Educational.

Seewald, Shelly G. *Apes*. Primary Maneuvers.

UPPER ELEMENTARY LEVEL

Enz, Judith and Tanner, Joey. *Early People* (Zephyr Press Learning Packet). Tucson, AZ: Zephyr Press, 1983.

Higham, Charles. *Life in the Old Stone Age*. New York: Cambridge University Press.

King, Clive. *Stig of the Dump*. New York: Penguin Books, Inc. (Fiction)

McCord, Anne. *Early Man*. Usborne/Hayes.

McGowen, Tom. *Album of Prehistoric Man*. Chicago, IL: Rand McNally & Co.

Morris, Margery and Aprink, Michael. *How Man Became*. New York: Penguin Books, Inc.

Mulvey, Mina White. *Digging Up Adam*. Van Rees.

Packard, Edward. *The Cave of Time*. New York: Bantam Books, Inc. (Fiction)

White, Anne Terry. *The First Man in the World*. New York: Random House, Inc.

ADULT LEVEL

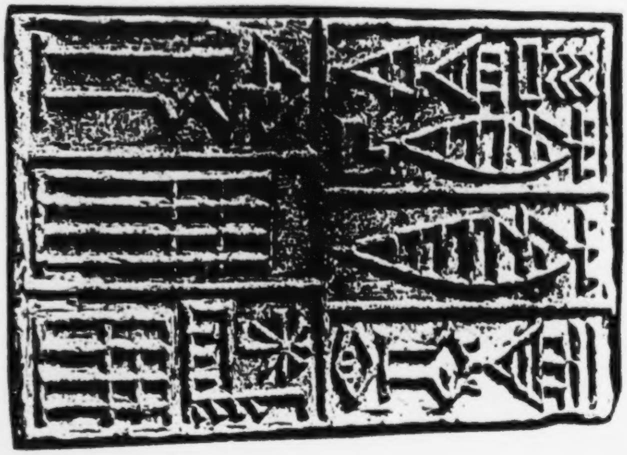
Cappelluti, Frank J. and Grossman, Ruth. *The Human Adventure*. California State Text, 1973.

Higham, Charles. *The Earliest Farmers and the First Cities*. New York: Cambridge University Press.

Man's Place in Evolution. British Natural Museum in London.

Shenfield, Margaret (translator). *Cave Printing*. New York: Crown Pubs., Inc.

THE SUMERIANS



Very little is known about the origin of the people who settled in the valley between the Tigris and Euphrates Rivers. This land was called Mesopotamia. In the southern part of Mesopotamia was a region called Sumer. The people who settled here were called Sumerians. The Sumerians are believed to have entered Mesopotamia in the fourth **millennium** B.C. They developed a very advanced civilization. The excavations at Ur, a famous city of Sumer, unearthed thousands of clay tablets that revealed a highly developed culture. Today, Mesopotamia is known as Iraq.

The Sumerians built large cities. Their civilization was predominantly urban. Each city had a massive, terraced temple in the center known as a ziggurat. The Sumerians also built huge, thick walls around the edges of the towns. The walls protected the people from invaders. There were small farming **hamlets** outside the walls of the city. Because each city had its own ruler and its own government, it was called a city-state.

The Sumerians used the wheeled chariot, the plow, and the sailboat. Some genius in Sumer is recognized as the inventor of the wheel. The people learned how to make bricks. Wood fibers were woven into cloth. They also made articles of metal. As no metal was available in Sumer, this item had to be imported. Therefore, records were needed to keep accounts of the transactions and importing.

The Sumerians are the earliest known people to have developed their own system of writing. The early writing resembled what we know now as Egyptian **hieroglyphics** and was found on clay tags. These tags had someone's name on them. They were usually attached to a bundle of goods to be traded. The signature on the tag identified the owner of the goods. People used pictures to describe what was being traded or shipped. These pictures are called pictographs or simple "thing-pictures." As writing eventually began to express more ideas, it incorporated ideographs. There were also sound pictures, which are related to a real alphabet.

The appearance of writing began to change. The first drawings were made by using several tools. The pictures had both curved and straight lines. People started to make the pictures simpler and more stylized. In this way, they were easier to copy. The Sumerians made many discoveries about writing. They found that it was easier to use one tool. This tool was called a **stylus**. The stylus was formed from a thin reed or bone, and it had a triangular tip. The Sumerians also realized that tablets made from clay could be used for their writing. The tablets could be baked or dried in the sun. Because of the proximity to the two rivers, there was always an abundance of clay available for their needs. Clay is almost **indestructible**.

These two discoveries, the stylus and clay tablets, caused some changes in writing. It was difficult to draw curved lines with the stylus on the clay tablets. Straight, short strokes were much easier to **incise**. Also, the Sumerians changed the direction of their writing. They originally started at the right-hand top of the tablet and continued down to the bottom. But they eventually started writing from left to right, corresponding to our present direction of writing.

Scribes used the very tip of the stylus to write with. Each character could be made from wedge-shaped lines. The wedges came from the triangular tip of the stylus. This was cuneiform writing. The word is derived from the Latin word *cuneus,* meaning "wedge-shaped." Cuneiform writing became **rebus-writing.**

The Sumerians were extremely industrious people. They had many needs for writing. But not everyone learned how to write. Public scribes earned a living writing messages and contracts for other people. You could always locate a scribe near the marketplace or the center of town. This is where most of the business was conducted. So, when anyone needed something recorded, a public scribe was hired. His tools were a lump of clay and a stylus.

In 2000 B.C. a law was passed that required every business transaction to be recorded and signed by the contracting parties. Each man wore his "signature" around his neck. It was a **cylinder** seal with impressed figures that represented religious designs. The seal was rolled in wet clay and served as a signature. It was the person's trademark. After the nature of the transaction was explained to the scribe, he started writing. He wrote rapidly, covering his tablet with fine incisions.

Other scribes educated the sons of wealthy, important men. Schools were called *edubba,* "tablet houses." A schoolroom had mud-plastered walls. The floors were paved with tiles or burnt brick. There were rows of benches. Large basins of clay were placed on the floor between the benches. After each pupil took some clay and kneaded it into a tablet shape, he was ready to begin his lessons. He copied his exercises from his master's example. Discipline was unusually strict. There was no sparing of the rod.

The major purpose of the school was to train scribes to serve the economic needs of the country. However, with a broadened curriculum, the school became the center for culture. There was also a focus on literature and creative writing.

In the northern area of Mesopotamia lived the Babylonians and the Assyrians. These people adopted the Sumerian cuneiform. However, they belonged to a different **linguistic** group, the Semites. One of the great rulers of Babylonia was Hammurabi. He ascended to the throne in 1700 B.C. Hammurabi was recognized for his excellent administration. He developed a code of laws to protect the individual's rights. Most of the laws were adopted from the Sumerians. However, Hammurabi assembled these laws into a code that was written on an 8-foot-high block of black stone. This stone was discovered by a French **archeologist** in 1901 in Persia, now known as Iran.

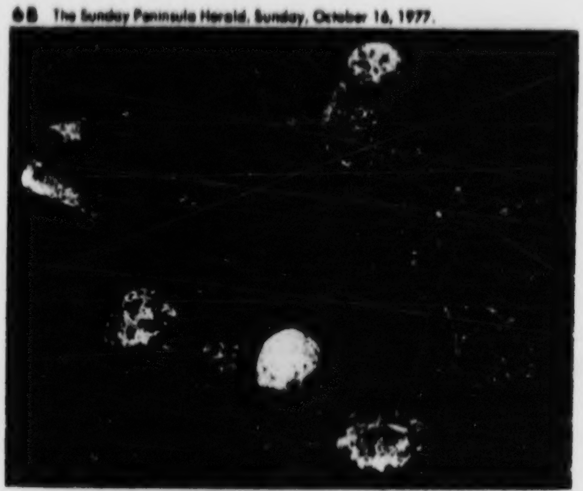
Life in Mesopotamia began to change. Different people began to assimilate the Sumerian culture. Predominantly, these were the Babylonians. The Babylonian educational system, mythology, and literature became almost identical to the Sumerian.

The influence of the Sumerian civilization spread over many **millennia**. Its origin and even its name ("Shumer" as found in the cuneiform documents) are still shrouded in mystery. Yet there is no doubt about the Sumerians' important role in the development of writing and our alphabet.

Vocabulary

millenium
hamlets
hieroglyphics
stylus
indestructible
incise
scribes
rebus-writing
cylinder
linguistic
archeologist
millennia

6B The Sunday Peninsula Herald, Sunday, October 16, 1977.



(Christian Science Monitor Service photo)

IMPORTANT FINDS — Stone tokens like these, found at Mideastern archeological sites, originally were encased in clay envelopes.

Ancient Trade Tokens May Be Link to Writing

By Douglas Starr

Christian Science Monitor Service

AUSTIN, Texas — Archaeologists generally think that handwriting began around 5,500 years ago in ancient Sumeria (modern-day Iraq). Now a researcher has found evidence that she believes pushes back handwriting's invention another 5,000 years.

According to Denise Schmandt-Besserat, assistant director of the Center for Middle Eastern Studies at the University of Texas, Austin, handwriting may have developed as a means to symbolize small tokens used in trade. She studied the tokens during eight years of research at archaeological sites and collections in the Mideast and museums in Europe.

Beginning around 8000 B.C., small clay tokens were used to represent items and numbers. Shepherds, for example, kept track of how many animals were in which pasture by using tokens representing sheep and transferring the tokens from one basket to another.

Mrs. Schmandt-Besserat says that, beginning around 3500 B.C., the tokens were kept in clay envelopes known as bullae when used in trade.

Used a Middle Man

"The producer consigned his goods to the care of a middle man together with a bulla containing the number of tokens equivalent to the shipment," she writes in a recent issue of Discovery, a publication of the University of Texas. By breaking the bulla, "the recipient could check the accuracy of the shipment upon arrival."

The only way traders could check the accuracy of the shipment was to actually break the clay envelopes. But soon bullae began to appear with signed impressed on the surface, representing the tokens inside.

This was "the crucial link between an archaic system of recording in three dimensions and writing," according to Mrs. Schmandt-Besserat. "As soon as the system of marks was generally understood, it obviously made the system of placing the tokens inside the bulla superfluous and obsolete."

Inscribed Signs Next

Shortly afterward, cushion-shaped tablets with inscribed signs began to appear. Archaeologists have found thousands of the tablets throughout the Mideast, and thought them to be the earliest form of handwriting. Theories suggested that previous forms were practiced on materials, such as wood, that decomposed.

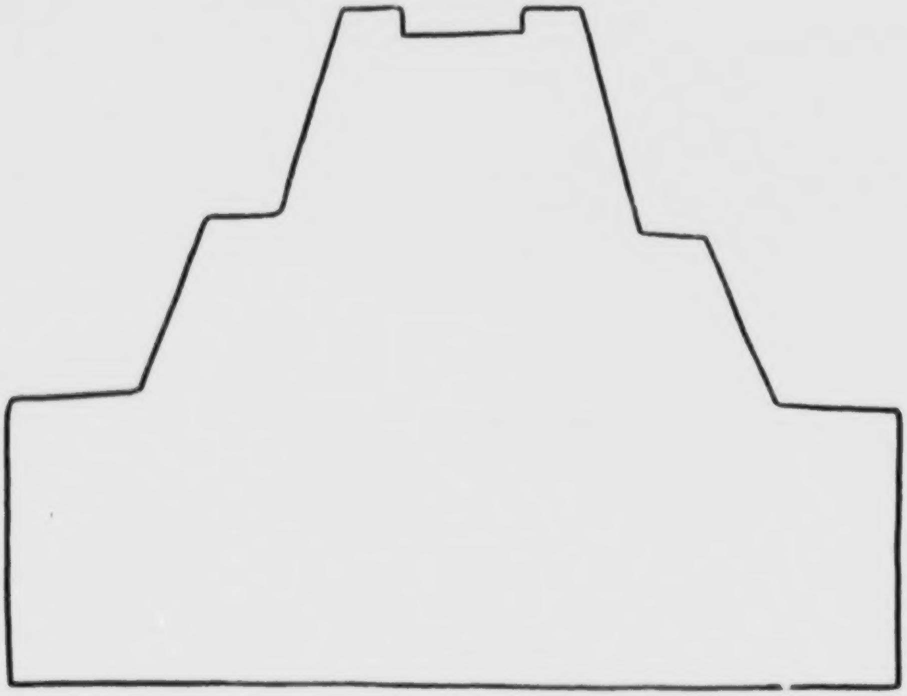
"We thought that writing came out of nowhere," said Mrs. Schmandt-Besserat says. "But this puts writing in the perspective of a recording system that existed all along."

She adds that with the development of finer writing tools and more products to represent, the simple signs found on bulla evolved into the more complex pictographs found on clay tablets.

The archaeologist notes that the discovery of the tokens' use could lead to additional findings. Tokens, bullae, or tablets found in certain areas "might be an indication of perishable goods and give us an idea of how trade was going."

Mrs. Schmandt-Besserat began her research to investigate man's early use of clay. Throughout her travels she repeatedly came across the small tokens, finally realizing that they must have been used to represent goods.

BEST COPY AVAILABLE



ACTIVITIES

THE SUMERIANS
Knowledge—Locate Sumer on a map. Develop a fact sheet on Sumer that includes at least 10 facts about its location and climate.

THE SUMERIANS
Knowledge—What writing materials did the Sumerians use? Make a poster depicting these materials. On the poster, include an explanation of why the Sumerians chose these materials to use.

THE SUMERIANS
Comprehension—Define the following: scribe, Ur, ziggurat, stylus, rebus, cuneiform, Mesopotamia. Develop an informational paragraph that includes all of these words.

THE SUMERIANS
Comprehension—Prepare a short monologue or a paragraph that explains why clay tablets were used for writing.

THE SUMERIANS
Application—Make a stylus from something you find at home or in the classroom. Flatten a piece of clay and use this as a tablet to write on with the stylus. Display your tablet and stylus attractively, with an explanation of cuneiform symbols included in the display.

THE SUMERIANS
Application—Develop a code or symbol system that is appropriate for your community. Write a letter to a friend using the code or symbol system. Include a key for deciphering the message.

THE SUMERIANS
Analysis—Analyze the advantages and disadvantages of clay tablets for writing. Make a chart that lists the advantages and disadvantages. Include three reasons why the tablets were used in spite of the disadvantages.

THE SUMERIANS
Analysis—Compare and contrast Chinese picture writing and Sumerian symbols. On a poster, illustrate the similarities and differences and the reasons for them.

THE SUMERIANS
Synthesis—Create a legendary hero or heroine after you read *A Song for Gilgamesh*. Write or tell a story about your hero or heroine, or make the story into a play you and your friends can present to the class.

THE SUMERIANS
Synthesis—Create a puppet show that provides information about Sumerian culture as well as entertainment. Make puppets and present your show to your class or to another group.

THE SUMERIANS
Evaluation—What do you consider the most important contributions of the Sumerians to other civilizations? List at least three, then rank them according to importance. Explain the reasons for your ranking.

THE SUMERIANS
Evaluation—Develop a list of 10 characteristics that mark an advanced culture. Evaluate Sumerian culture on each of these characteristics by rating it from 1 to 10. Present the list and ratings on a poster that includes reasons for the ratings.

BIBLIOGRAPHY

PRIMARY LEVEL

Thompson, Ruth. *The First Farmers*. MacDonald Educational.

UPPER ELEMENTARY LEVEL

Chieera, Edward. *They Wrote on Clay*. Chicago, IL: University of Chicago Press.

Cottrell, Leonard. *Land of the Two Rivers*. World Publishing Company.

Enz, Judith and Tanner, Joey. *Ancient Civilizations* (Zephyr Press Learning Packet). Tucson, AZ: Zephyr Press, 1983.

Fairservis, Walter A., Jr. *Mesopotamia, The Civilization*. New York: Macmillan Publishing Co., Inc.

Forrest, Kent L. *Sumer and Babylonia*. St. Louis, MO: Milliken Publishing Co.

Higham, Charles. *The Earliest Farmers and the First Cities*. New York: Cambridge Univ. Press.

Hodges, Elizabeth Jamison. *A Song for Gilgamesh*. New York: Atheneum Pubs.

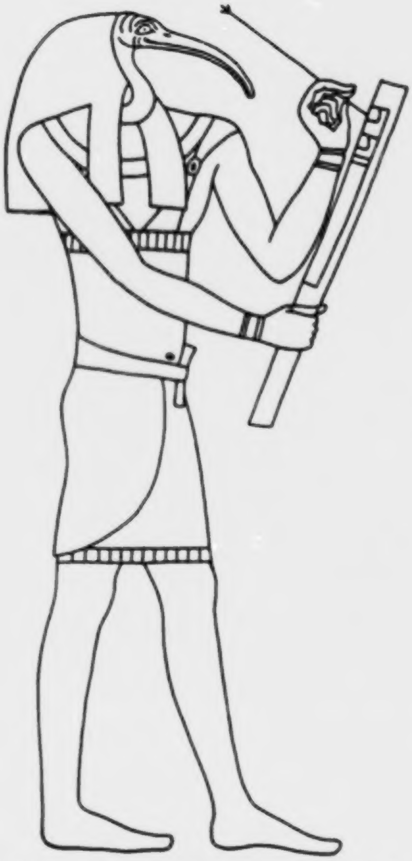
Millard, Anne. *The First Civilization*. Usborne Press.

Woolley, C. Leonard. *The Sumerians*. Marton.

ADULT LEVEL

Kramer, Samuel Nook. *The Sumerians*. Chicago, IL: University of Chicago Press.

THE EGYPTIANS



Thoth, the scribe of the gods, is from a fragment of a funerary papyrus, Ptolemaic period, Cairo museum.

One of the world's earliest civilizations was developed by the Egyptians. Along the banks of the **fertile** Nile River, these people became extremely **diversified** in their skills and interests. They were primarily farmers. However, they also raised domesticated animals. They became famous as builders of the **pyramids,** which incorporated many of their advanced skills in mathematics and art.

At approximately the same time each year, the Nile River overflowed its banks. The Egyptians devised an irrigation system to divert and store this water. This was quite a sophisticated device. With the availability of fertile land, the people of Egypt raised sufficient food to allow people freedom to work at other occupations besides farming. They became craftsmen and priests and priestesses devoted to studying and practicing religion. Part of the Egyptian religion involved inscriptions on the stone walls of the temples.

It is a **moot** point which writing is older: the Sumerian or the Egyptian. However, the oldest form of writing is hieroglyphics. Objects were accurately pictured. A picture of a lion's head depicted a lion's head. The shape of a mouth was a mouth. Egyptian writing evolved through the stages of pictographs, ideographs, and rebus-writing. The ancient Egyptians believed that writing was invented by Thoth, the moon-god.

There were three known forms of Egyptian writing: hieroglyphic, hieratic, and demotic. Hieroglyphics were used for religious and decorative purposes. Pictures were cut into stone, wood, and other materials. The skill of the stone cutter was quite evident. Inscriptions were executed beautifully. Sometimes these inscriptions were written from right to left and then from left to right. This writing was called **boustrophedon**. Hieroglyphic writing contained 24 **uniconsonantal** signs. Examine these signs on pages 35 and 36. We can assume that the Egyptians were alphabet conscious and possessed the world's earliest approach to an alphabet. In a pure alphabet, each sign denotes one sound only. Each sound is represented by a single, constant symbol. In Egypt different sounds existed for the same symbol.

The Egyptians had many purposes for their hieroglyphics other than ornate inscriptions. However, for business forms, personal letters, and literary manuscripts this method of writing was a **cumbersome** task. These items could not be inscribed in stone. The Egyptians found a material on which they could write—made from the **papyrus** plant. This tall reed plant grew to a height of 12 or 15 feet. Its stalks were triangular in shape and about 6 inches in diameter at the thickest part. The first step in making paper was to cut the long stems into shorter pieces. Then the outer rind was removed. The exposed inner **pith** was sliced lengthwise into thin strips. The Egyptians laid the strips of raw papyrus crosswise in a double layer onto a flat stone. A cloth was stretched over the strips and the papyrus was beaten with a wooden **mallet** for an hour or more until the strips were matted together into a single sheet.

The sheet was then pressed under a heavy weight. A papermaker polished the sheet with a rounded stone, trimmed the edges, and pasted several sheets together depending upon the length of roll needed. The longest roll discovered to date is the great Papyrus of Ramses III. This roll measured 135 feet in length. It can be viewed in the British Museum. On the papyrus rolls, the Egyptians used a reed for writing. Their ink came from colored earth mixed with gum and water. Sometimes the inks were made from vegetable substances.

Hieroglyphics began to lose their pictorial characteristics for two reasons. First, the speed needed for the documents influenced the scribes to abbreviate more. Second, using a reed to write on papyrus didn't create sharp outlines. A **cursive** form of writing was developed called hieratic. This form was used by the priests in copying literary works. Hieratic writing and hieroglyphics were used for 3,000 years.

Demotic, a third form of Egyptian writing, is an abbreviated form of the hieratic. The demotic was used by business people. It was a system of writing that was neither purely **syllabic** nor alphabetic. It became the popular script of the people of Egypt. In the beginning it was used for business and personal letters, but in time it was adopted for copying ancient books. Demotic writing is very difficult to read. When the Egyptians began to spell their words with alphabetic signs, they found that it was difficult to indicate the meaning and sounds of the words to be written. They added word signs that we call determinatives. Determinatives divided words into two groups: a single species or an entire class. They were placed before or after a word to denote the class to which it belonged. For example, the determinative for "plural" would be used to indicate more than one. The demotic is the style of writing used in the middle inscription on the Rosetta Stone.

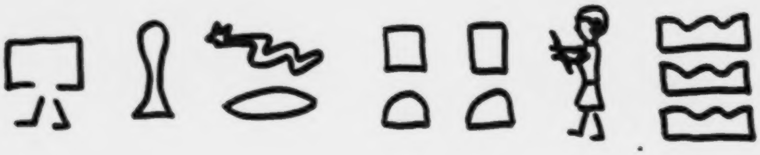
The discovery of the Rosetta Stone in August 1799 was considered by archaeologists to be a great triumph. This stone was found by some French soldiers from Napoleon's army. The broken slab of **basalt** was lying on the ground near the town of Rashid. The Europeans call this town Rosetta. Noting the strange characters on the stone, the soldiers thought that it might be writing. Napoleon ordered it sent to Cairo for further study. After Napoleon's defeat, the British shipped this valuable **curio** to the British Museum.

There are three kinds of inscriptions on the stone. At the top, Egyptian hieroglyphics consist of only 14 lines. The middle portion is written in demotic. This text is 32 lines. At the bottom the writing is in Greek. Here there are 52 lines. What a task to decode this Rosetta Stone! Beginning with the known, the Greek text, **decipherment** began to unlock ancient keys to the past. Dr. Thomas Young, an Englishman, proved that some of the Egyptian characters were letters, not just pictures. It was also Young who determined that an oval, or cartouche, contained a proper or royal name. From this beginning the **arduous** task of translation became the lifetime work of Jean-F. Champollion, a Frenchman. Champollion is credited with the accurate deciphering of the two forms of Egyptian writing found on the Rosetta Stone. As a young student, Champollion had studied **Coptic**. His knowledge of Coptic provided him with the clue to many phonetic values of the signs. The Rosetta Stone contains an inscription of a **decree** passed by the Egyptian priests to celebrate the **commemoration** of the **coronation** of Ptolemy V, the king of all Egypt. It was drawn in the year 196 B.C. One cartouche is repeated five times. It is the cartouche of Ptolemy.

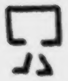
The Egyptians never seemed to spell one thing the same way every time. For example, in the fourteenth line of the Rosetta Stone the word "writing" appears four ways. First it is spelled out, after which it is followed with a picture of a man writing. The third and fourth times it is indicated by a reed and a bottle of ink. The fifth time it is spelled out in another manner. Thus, the writing was extremely complicated.

Let's join Mosi, age 10, the son of a wealthy landowner, for a day at his school. Mosi lives in a large house a few miles up the Nile River from the city of Memphis. Mosi is learning to be a scribe. He plans to assume his father's role after his father has retired. At school Mosi spends most of the day studying hieroglyphic inscriptions. School isn't much fun. There are no sports or games. The day is devoted to studying, copying, and chanting texts aloud. Mosi must learn how to read and write the hieroglyphics. There are no written vowels, so many words look alike.

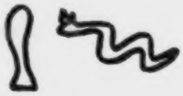
Mosi's assignment is to translate the following hieroglyphics:



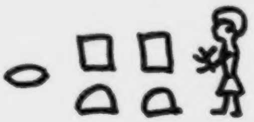
There is a mixture of sound and word signs. To help clarify the meaning of a word, a determinative has been added. Let's examine each hieroglyph. Refer to the key for assistance if necessary.



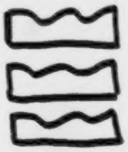
The word for "house" sounds like the word for "go forth," so the house symbol is used for both. The walking legs show that here it means "go forth."



The club is a sound sign that means "majesty." The snake is the Egyptian letter "f." It can also be used to mean "his," as it does here.



The mouth symbol is the letter "r." Here it is the word "to." The stool is the sound for "p," the loaf of bread for "t." Repeated, they spell the word for "crush." To clarify, a determinative sign for "force"—a man striking with a stick—has been added.



As Egypt is flat, the sign for "hill" also means "foreign land." Here it is plural.

KEY

WORD SIGNS AND DETERMINATIVES

(WALKING LEGS) GO
(MAN WITH STICK) FORCE

(HILLS) FOREIGN LAND

SOUND SIGNS

(HOUSE) STANDS FOR 'PR'
(MOUTH) STANDS FOR 'R'

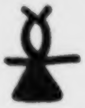
(CLUB) STANDS FOR 'HM'
(STOOL) STANDS FOR 'P'

(SNAKE) STANDS FOR 'F'
(LOAF OF BREAD) STANDS FOR 'T'

Can you help Mosi figure out what these hieroglyphics say?

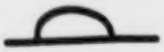
An interesting characteristic of the Egyptian people was their reverence and respect for the past. This is clearly indicated in their writing system. In reviewing the writing system that influenced the development of our alphabet, we have the following:

1. **THING-PICTURES** (the object depicts an item):



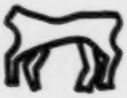
This is a picture of a token for the word "token."

2. **IDEA-PICTURES** (the object depicts an idea):



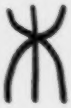
This is a picture of a sinking sun for the word "death."

3. **SOUND PICTURES FOR ENTIRE WORDS:**



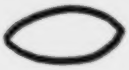
This is a picture of a hide for "approach."

4. **OTHER PICTURES FOR SYLLABLES:**



This whip represents "mes."

5. **STILL OTHERS FOR LETTER SOUNDS:**



This mouth is the letter "r."

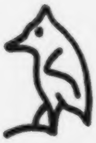
The Egyptians made enormous contributions to our alphabet. There are many other civilizations that also contributed to the development of sets of characters that we call the alphabet. However, information is very limited. The translation from Egyptian to Greek refers to a group of people known as **Canaanites,** who lived in the coastal part of the land we know as Syria. The Greeks called these people Phoenicians. In Greek, this word translated means "blood-red." The Phoenician sailors wore brilliant crimson uniforms. These people were avaricious traders. The capital of Phoenicia was Byblos. The merchants of Byblos went to Egypt to purchase papyrus. In Egypt, they began to learn to use the Egyptian characters for their writing. These hard-bargaining traders then developed a set of characters based on the **Sinai** alphabet. No vowels were included. The signs represented single consonants. The Phoenicians used a form of speedwriting; for example, they would write the word "week" as "wk."

One of the finest examples of Phoenician writing was a discovery in 1868 in the vicinity of the **Dead Sea.** This is the Moabite Stone. The stone is now housed in the Louvre Museum in Paris. It was much easier to decipher than the Rosetta Stone because the letters resemble Greek letters. Ancient traders had carried their writing and alphabet to the peninsula of Greece.

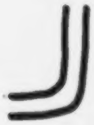
Vocabulary

fertile
diversified
pyramids
moot
boustrophedon
uniconsonantal
cumbersome
papyrus
pith
mallet
cursive
syllabic
basalt
curio
decipherment
arduous
Coptic
decree
commemoration
coronation
Canaanites
Sinai
Dead Sea

EGYPTIAN ALPHABET — 24 SIGNS

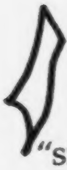


a
as in
"balmy, alms"

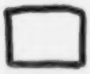


b
as in
"bobbed"

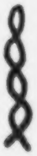
h
as in
"hop"



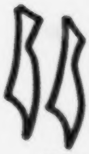
i
as in
"sitting"



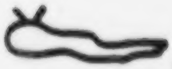
p
as in
"pink"



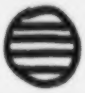
h
as in
"ha!"



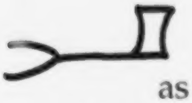
ee
as in
"feeding"



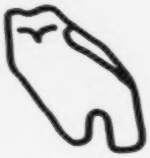
f
as in
"fearsome"



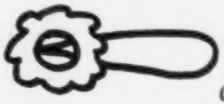
kh
as in
"lock"



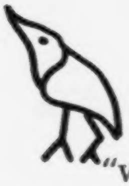
a
as in
"ah, arms"



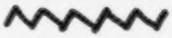
m
as in
"mummy"



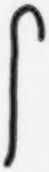
ch
as in
"ochre"



w
as in
"wings"



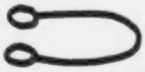
n
as in
"near"



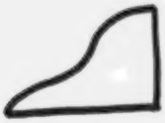
s
as in
"standing"

EGYPTIAN ALPHABET (cont.)

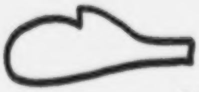
sh
as in
"shady"



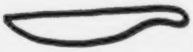
tj
as in
"check"



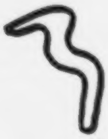
g
as in
"green"



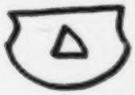
d
as in
"dirty"



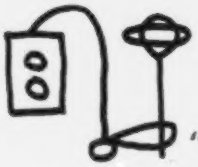
r
as in
"red"



dj
as in
"edgy"



g
as in
"golden"



k
as in
"king"

t
as in
"tasty"

2 San Francisco Chronicle ★★ Fri., Dec. 30, 1977

Ancient Texts May Jar the Church

Charles Petit
Science Correspondent

Two Egyptian peasants named Muhammed and Khalifah Ali set out one December morning in 1945 intent on nothing more than taking fertilizer to their fields.

Instead, they discovered, partially buried next to a large rock where they hobbled their camels, an ancient jar. Smashing it apart in the hope of finding gold, Muhammed discovered it contained only a pile of crumbling, leather-bound papyrus books.

The books that the disappointed Muhammed slung over his shoulder and carried back to his hovel have since become recognized as a treasury of the beliefs of a shadowy cult known as the gnostics, stamped out by orthodox Christianity in the fourth century A.D. as heretical.

Yesterday, a group of scholars who have labored under United Nations and Egyptian government sponsorship since 1970, released a translation of the books, the Nag Hammadi Library.

It was hailed as the equivalent in some respects to the Dead Sea scrolls for its illumination of the early formation of the Christian Church.

But even today, one Biblical scholar said, some 1600 years or more after the ideas were first written down by gnostic scholars, the library can expect to create nervousness within Christian denominations.

The release of the translation — published by Harper and Row — was made at the Hilton Hotel as part of a convention sponsored by the American Academy of Religion, American Schools of Oriental Research, and the Society of Biblical Literature.

While some 25 of the 53 papyrus documents have been translated, yesterday's publication represents the first time that the entire body of texts has been made available to scholars.

The gnostics, one participant at the meeting said, "turned orthodox Christianity on its head."

Added to sketchy accounts by orthodox Christians in the fourth and fifth centuries, the Nag Hammadi library of more than 1100 intact pages of gnostic mystical literature paints a far different picture of the world than is taught by today's Christian and Jewish faiths.

JAMES BRASHLER
Editor of the translation

Instead of a god of love and ultimate power, the creator of the world is depicted by the gnostics as an evil force.

Christ, while acknowledged as the son of the true, all-powerful god, is portrayed as a messenger to a select few — the gnostics — telling them how to ascend from this blighted world to awareness of a higher, purer reality.

And, there are suggestions in the lyrical coptic script of the books that Christ was not crucified, but may have substituted someone else while he rose above and laughed at the proceeding.

"They really rejected this life, and I think you can find parallels in modern society," said the editor of the book and the project leader, James M. Robinson.

He suggested that the rejection of modern society by the hippies of the 1960s, and the despair of some books such as Albert Camus' "The Stranger", are parallel to gnostic beliefs.

All the Nag Hammadi books except one have been in Egypt since their discovery, and arguments over ownership and Egypt's determination to preserve the works has hampered the translation process, Robinson said.

But one book smuggled out by an antiquities dealer, found its way into the hands of psychologist Carl Gustav Jung in 1952, who found in gnostic writings a powerful illustration of his own conviction of the importance of dreams.

Indeed, a gnostic description of the state of mind of ordinary persons, whom many gnostics despised, is startlingly like a Jungian list of dream states:

"Thus they were ignorant . . . as if they were sunk in sleep and found themselves in disturbing dreams. Either there is a place to which they are fleeing, or without strength they come from having chased after others . . . or they take off into the air though they do not even have wings."

An assistant director of the Institute for Antiquities and Christianity of the Claremont Graduate School near Los Angeles, where the project was headquartered, said the real impact of the translation hasn't yet been felt.

"I've heard one Baptist minister tell me I'm from the Institute for Iniquities and Christianity," said James Brashler. "There are a lot of people who would just as soon this material not be studied. Their attitude is that the church got rid of it for good reasons and there is no point in bringing it up again."

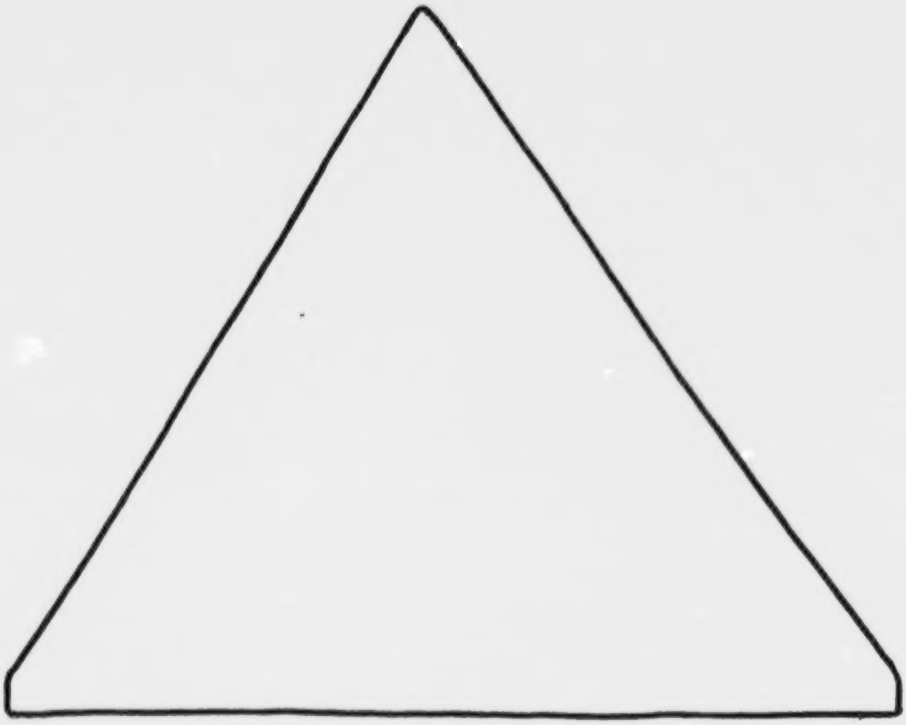
But, historians as well as biblical scholars regard the writings as a vital part of Western civilization's heritage.

In fact, Douglas Parrott, a professor of religious studies at the University of California at Riverside, said the defeat of gnosticism and its inward-turning mysticism may have played a crucial role in the development of Western culture.

"If the concept that the world is basically bad had been a major part of Christian belief," he said, "Western civilization may have developed more along the lines of India. It would have prevented the industrial and technological revolutions."

A papyrus page from the gnostic library

BEST COPY AVAILABLE



ACTIVITIES

THE EGYPTIANS
Knowledge—Locate Egypt on a map. Make a mobile that illustrates at least five facts about Egypt.

THE EGYPTIANS
Knowledge—What is papyrus? Make a poster that explains and illustrates how papyrus is made.

THE EGYPTIANS
Comprehension—Define: pharaoh, pyramid, hieroglyphics, hieratic, demotic. Make a crossword puzzle that uses these words and others related to the study of Egypt.

THE EGYPTIANS
Comprehension—In a three- to five-minute monologue, explain why Egypt is called "the cradle of civilization."

THE EGYPTIANS
Application—Conduct research on the Rosetta Stone. Make a facsimile of this stone to scale. Present the facsimile and what you learned to the class through either an oral or written presentation.

THE EGYPTIANS
Application—Practice writing hieroglyphics: demotic and hieratic. Make a poster that illustrates hieroglyphics and what you have learned about them.

THE EGYPTIANS
Analysis—Make a chart that compares and contrasts the making of papyrus and the manufacture of paper. Note similarities and differences in the process and end result and the reasons for these similarities and differences.

THE EGYPTIANS
Analysis—Compare your school day with that of an Egyptian student who lived in the time of King Tut. In a short play, show the similarities and differences between the two school days.

THE EGYPTIANS
Synthesis—Choose a specific era and research (from at least five sources) life in Egypt during that era. Using this information, create a mural that depicts your interpretation of Egyptian life at that time.

THE EGYPTIANS
Synthesis—How would you embellish a tomb of a soldier, a teacher, a doctor, following the Egyptian custom? Create a mobile or a poster that illustrates each type of tomb.

THE EGYPTIANS
Evaluation—In a one-page essay, explain your evaluation of the influence of Egyptian writing, art, music, or culture in general on the modern world. Be sure to support your evaluation with reasons.

THE EGYPTIANS
Evaluation—Debate with a friend for the class what you consider to be the three major contributions to our alphabet by the Egyptians and why these are major, rather than minor, contributions.

BIBLIOGRAPHY

UPPER ELEMENTARY LEVEL

Kay, Shirley. *Digging into the Past*. New York: Penguin Books, Inc.

Budge, E. A. Wallis. *The Dwellers on the Nile*. New York: Dover Pubns., Inc.

Scott, Joseph and Lenore. *Egyptian Hieroglyphs for Everyone*. New York: Funk and Wagnalls Co.

Budge, Sir Wallace. *The Egyptian Language*. New York: Dover Pubns., Inc.

Manniche, Lisa. *How Djadja-em-ankh Saved the Day*. New York: Thomas Y. Crowell Co.

Allan, Tony. *Time Traveller*. Usborne/Hayes.

Allan, Tony. *Book of Pharaohs and Pyramids*. Usborne/Hayes.

Enz, Judith and Tanner, Joey. *Ancient Egypt* (Zephyr Press Learning Packet). Tucson, AZ: Zephyr Press, 1983.

ADULT LEVEL

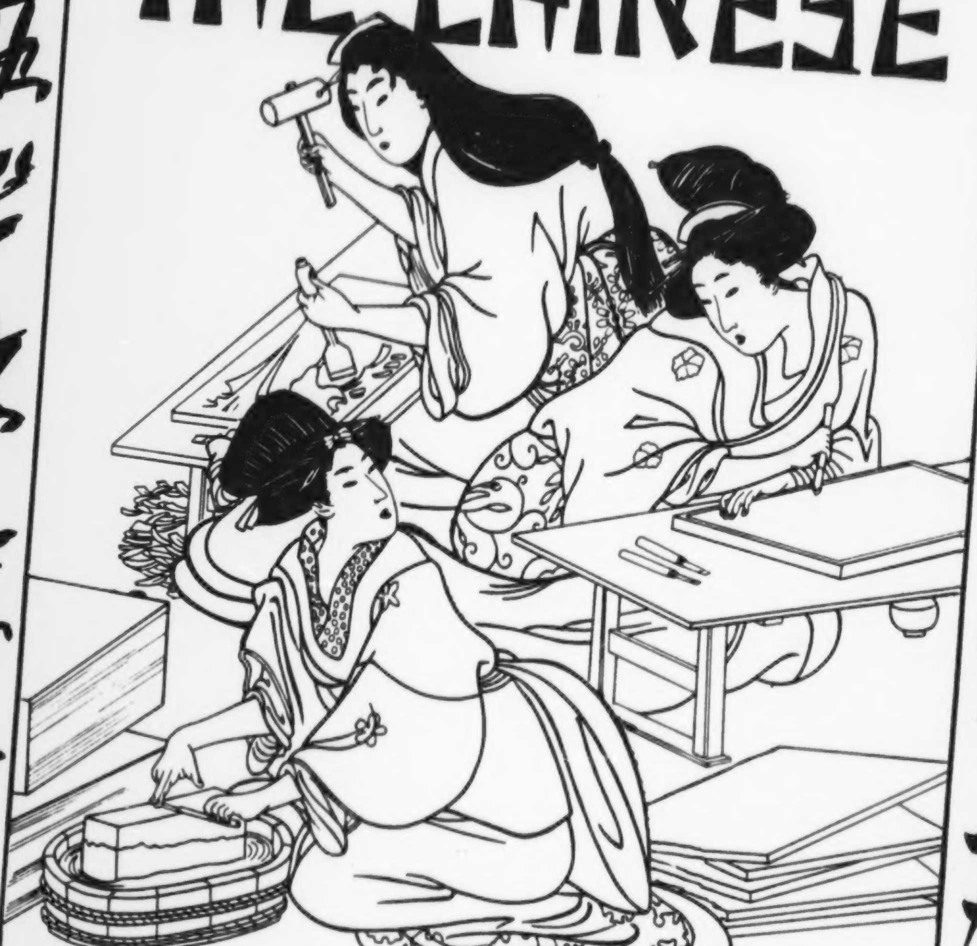
Phoenix and Arabeth. *The Magic of Ancient Egypt*. Norman, OK: San Anselmo Publishing Co.

Budge, E. A. Wallis. *Rosetta Stone*. Chicago, IL: Ares Pubs., Inc.

Pope, Maurice. *The Story of Archaeological Decipherment*. New York: Charles Scribner's Sons.

Evans, Larry. *Pyramid Puzzles*. San Francisco, CA: Troubador Press. (All levels)

THE CHINESE



These women are making wood blocks to be used for printing. One woman is transferring a design from a piece of paper onto a block of wood, while another woman is carving; the third woman is sharpening tools for them.

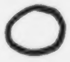
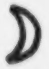
The Chinese

In a country comparable in size to the United States live one-fourth of all the people in the world. This is China. To the north of China is Russia. To the west is Central Asia. India lies to the southwest. Looking south we find the countries of Burma, Thailand, Laos, and Vietnam. Korea is situated to the northeast. Across the Yellow Sea is Japan. China calls herself "The Middle Kingdom" because of her location. And because of this geographic isolation from the Western countries, the Chinese in ancient days had no contact with these cultures. They had no idea that people were writing on clay tablets or papyrus or using other writing materials.

There are many theories regarding the origin of Chinese writing. Some scholars have argued that it was in progress for several centuries prior to the second millennium B.C. Others date it back even further. Whatever the case, there have been very few changes in the writing over thousands of years.

Chinese writing is very complicated because it has no true alphabet. Each **character** represents one basic idea and is only one syllable. This type of writing is called **syllabic**. A student must learn 3,500 characters just to read a simple novel. Scholars must know over 10,000 characters to read classical Chinese. Chinese characters are pictographic or ideographic.

Pictographic characters were originally simple pictures of things represented as follows:

 ("sun") and  ("moon").

They then developed into

日 ("sun") and 月 ("moon").

Ideographic characters are

人 ("man"), 山 ("mountain"),

上 ("up"), 下 ("down"),

and 一 ("one").

Certain characters suggest an idea; for example, sun and moon together mean "brightness."

The ancient classical language of China was called *wen yen*. It was used only for writing. All books were written in classical Chinese. Scholars were trained to read the classics, write poetry, paint, and make beautiful characters. These skills were the basic requirement for anyone to enter the huge **civil service** that has governed China for thousands of years.

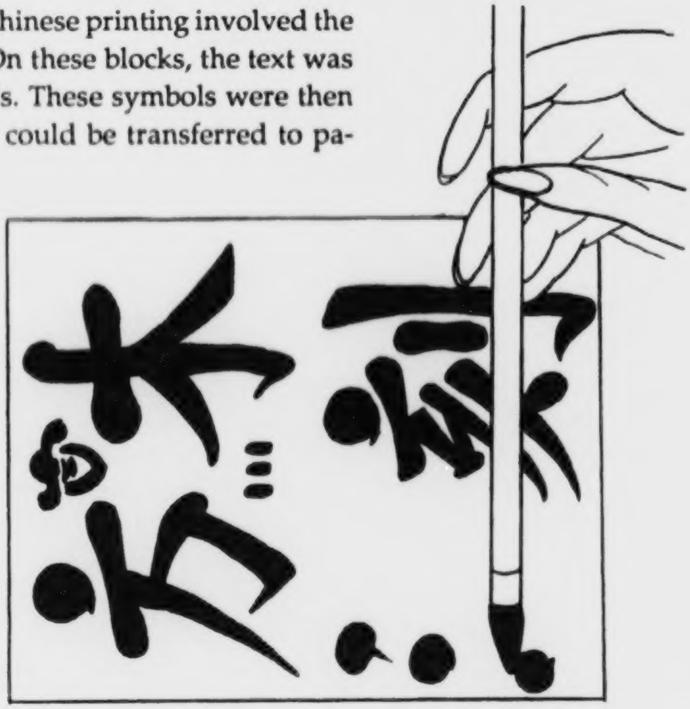
Though all China had the same written language, there were many different spoken dialects. In northern China the people spoke Mandarin while in the south they spoke Cantonese. In the city of Shanghai the people spoke yet another dialect. People throughout the country could not understand each other. The government of the People's Republic of China made Mandarin the national language even though the other dialects are still used.

The formation of a sentence in Chinese is the same as in an English sentence—a noun followed by a verb. In modern China writing is up and down from right to left in columns and also Western-style from left to right reading across.

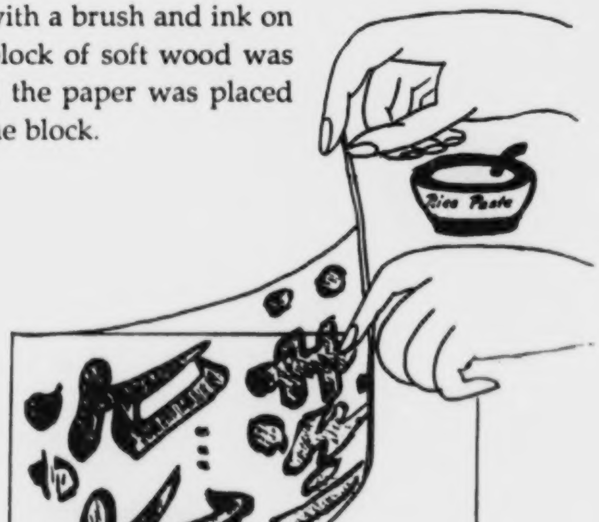
In China beautiful writing is considered an art, called calligraphy. This fine art has been found on tortoise shells and animal bones. It is important that the characters be pleasing to the eye. During the **Han** Dynasty (from 200 B.C. to A.D. 220), one of the emperors opened an official school, the Academy of Calligraphy. A great calligrapher, Po Chu, said that to express an idea or represent something properly in calligraphy it must be turned over and over again in the mind until it unites with the soul.

The materials employed by the calligrapher are inexpensive. The inkstone is used for grinding ink. The inkstick is ground with water on the inkstone to obtain the blackness desired. The ink is made by mixing soot and glue. The Chinese use rice paper to write on. Its stark whiteness is a contrast to the black ink. Before writing on rice paper, the Chinese wrote on silk. The brush is a very important item. The handle is usually bamboo and the tip is made of animal hair. Brushmaking is an important profession. The next few pages demonstrate the art of printing.

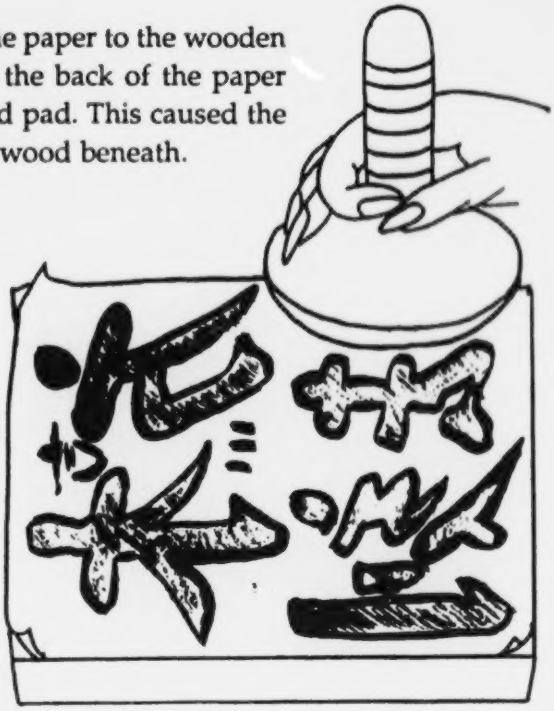
The earliest method of Chinese printing involved the use of wooden blocks. On these blocks, the text was carved in raised symbols. These symbols were then inked so an impression could be transferred to paper.



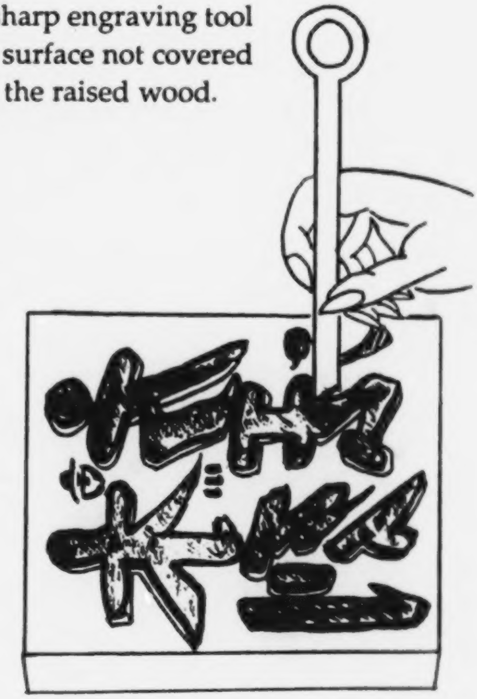
First the writing was done with a brush and ink on **translucent** paper. Then a block of soft wood was covered with rice paste and the paper was placed with its *inked side down* on the block.



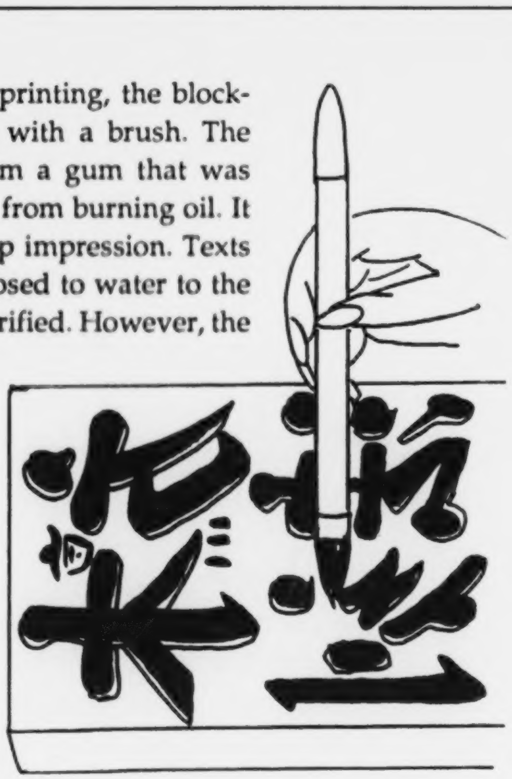
With the rice paste holding the paper to the wooden block, a block-cutter rubbed the back of the paper with a rounded, cloth-covered pad. This caused the ink on the paper to stain the wood beneath.



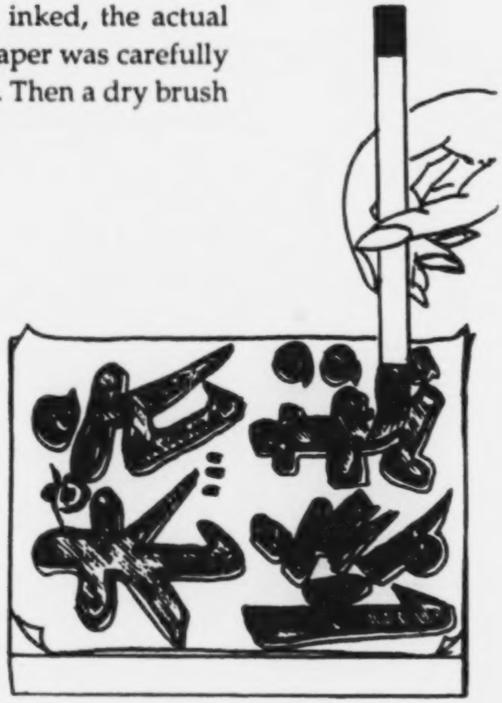
The paper was removed and a sharp engraving tool was used to cut away all of the surface not covered with ink, leaving the design on the raised wood.



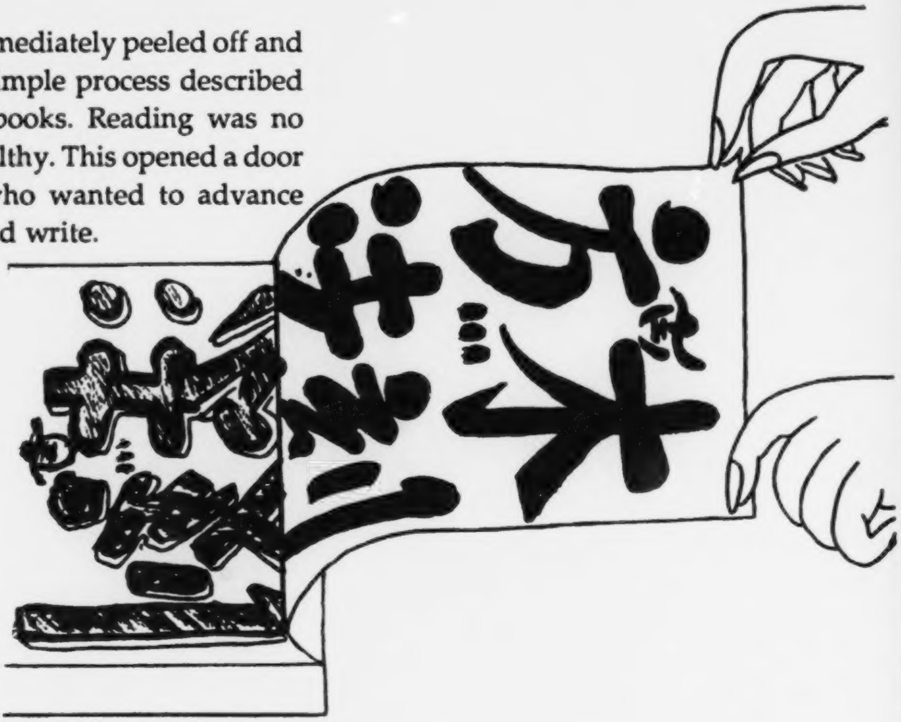
When the block was ready for printing, the blockcutter inked the raised design with a brush. The Chinese used an ink made from a gum that was mixed with lampblack, the soot from burning oil. It produced an indelible and sharp impression. Texts have been found that were exposed to water to the extent that the paper became petrified. However, the ink was not affected.



Once the carved block had been inked, the actual printing could begin. A piece of paper was carefully placed on top of the raised design. Then a dry brush was run lightly across the paper.



The designed paper was immediately peeled off and set aside to dry. With the simple process described above, the Chinese made books. Reading was no longer a privilege of the wealthy. This opened a door to education for anyone who wanted to advance through learning to read and write.



Here are some basic facts related to writing in Chinese:

1. There is no alphabet in the Chinese language. Each word has to be memorized.

2. Each character represents an idea and is one syllable.

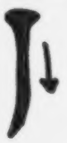
3. Chinese columns are read from top to bottom, right to left.

4. To read a simple novel, Chinese students must memorize 3,500 characters.

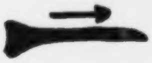
5. There are many different Chinese spoken dialects, but the written language is the same throughout China.

6. Each Chinese character or word is made up of strokes. Many characters have only a few strokes. However, some words have 25 strokes.

7. Vertical strokes are made by starting from top to bottom.

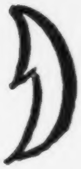
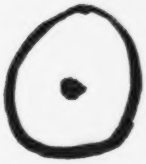
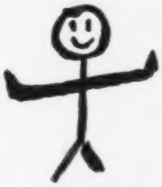
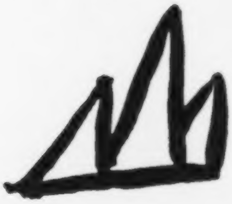


8. Horizontal strokes are made by starting from left to right.



The Chinese started a writing system from drawing simple pictures that represented objects from nature. Many characters in the Chinese language today came from these pictographs.

EXAMPLES

	moon	月
	sun	日
	big	大
	mountain	山

Vocabulary

character
syllabic
civil service
Han
translucent

Practice writing Chinese characters in the boxes below and on the following pages.

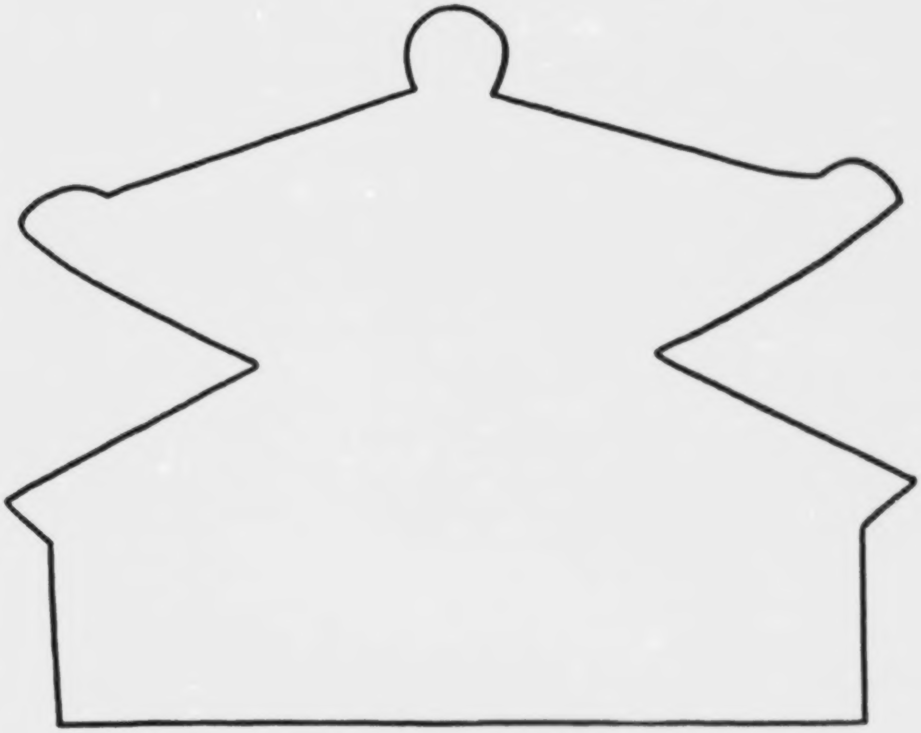
1	2	3	4	5
一	二	三	四	五

6 六	7 七	8 八	9 九	10 十

Moon or Month	**Two**	**Year**	**One**
月	二	年	一

Nine	Ten	Eight	Nine
九	十	八	九

Translation: February 1989



ACTIVITIES

THE CHINESE
Knowledge—Locate China on a map. Make a fact file of at least 10 facts about China.

THE CHINESE
Knowledge—Read the history of one Chinese emperor. Make a timeline of the important events that occurred during his life.

THE CHINESE
Comprehension—Define these words: oriental, dynasty, calligraphy, bamboo, Tao, communism. Use the words in a short essay on China.

THE CHINESE
Comprehension—Explain to the class the process used in early Chinese printing.

THE CHINESE
Application—Using brush strokes, practice Chinese characters (use the book *You Can Write Chinese* by Kurt Wiese). Make a poster that conveys a pertinent message written in Chinese characters.

THE CHINESE
Application—Learn the techniques of calligraphy and give a demonstration to the class.

THE CHINESE
Analysis—Locate a Chinese newspaper. Compare it with your local newspaper. Find similarities and differences between the two. Make a chart that illustrates your findings.

THE CHINESE
Analysis—Compare the pictographs of early humans, Egyptians, and the Chinese. Develop a presentation that uses visual aids and that illustrates the similarities and differences you discovered.

THE CHINESE
Synthesis—Write an original story that incorporates information about the development of Chinese writing or printing. Base your fiction on factual information.

THE CHINESE
Synthesis—Create a poem, then write the poem on art paper, using calligraphy.

THE CHINESE
Evaluation—What impact does a writing or alphabet system have on a culture? Examine the Chinese and one other writing system and culture. Explain to the class how each culture is affected by its writing system.

THE CHINESE
Evaluation—Which historical fact or event has influenced modern China the most? Prepare a filmstrip that portrays the historical event and the current result or effect and how they are related.

BIBLIOGRAPHY

PRIMARY LEVEL

Wiese, Kurt. *You Can Write Chinese*. Viking Seafarer Books.

UPPER ELEMENTARY LEVEL

Lewis, John. *The Chinese Man and the Chinese Woman*. Bergstrom and Boyle Books, Ltd.

Lewis, John. *The Chinese Word for Horse*. Bergstrom and Boyle Books, Ltd.

Lewis, John. *The Chinese Word for Thief*. Bergstrom and Boyle Books, Ltd.

Rekdal, C. K. and Kan, B.S.L. *Jingho Hauk Ho (Activity Book)*. Fortune Cookie Press.

Vanags, Patricia. *Empires and Barbarians*. Usborne/Hayes.

Wolff, Diane. *Chinese Writing*. New York: Holt, Rinehart & Winston, Inc.

Ancient China. Santa Barbara, CA: Bellerophon Books. (All levels)

THE GREEKS

Our word "alphabet" is derived from the first two letters of the Greek alphabet—*alpha* and *beta*. The Greeks gave us our first true alphabet structure. But who influenced the Greeks?

To understand the writing of the Greeks, it is important to recognize the role of the Phoenicians. **Epigraphers** have determined that the Greeks borrowed their writing from this group of Semites, who were seafaring people. The Phoenicians had trading markets throughout the Greek world. Investigation has proved that the Greek letters are closely aligned to the Phoenician letters. The early Greeks, the Dorians, adapted the characters of the Phoenicians about 1000 B.C. Similar to the Semitic scripts, the Greek inscriptions went from right to left. However, sometimes it was boustrophedon fashion. The classical method of writing from right to left changed about 500 B.C.

A Greek named Herodotus wrote that the Phoenicians introduced their writing and other arts to the Greek people. Herodotus has been called the "Father of History" because he was the first historian. Long before the time of Herodotus, the Greeks lived a very simple life. This was prior to the Golden Age of Greece, the Classical Period. This period began with the birth of Pericles and lasted from 499–399 B.C. Pericles made Athens, a city-state, the cultural and intellectual center of the ancient world. The Greeks practiced **democracy** in their city-state. All free, male citizens could vote. Our word **politics** comes from the Greek word meaning "city."

The Greeks are credited with many marvelous accomplishments. Architecture is one of the most important. Pericles built the Acropolis as the religious center of Athens. To honor the goddess Athena, the Greek Goddess of Wisdom, Pericles ordered the building of the Parthenon. The Greek modes of architecture have been replicated all over the world.

These people not only created architectural wonders, but they also perfected drama, wrote poetry, and explored the sciences and **philosophy**. The Golden Age ended with the death of Socrates, the philosopher, who dared men to become more **introspective**.

The Greeks borrowed 19 characters from the Phoenician alphabet. Other letters were adopted for different sounds. But the most important contribution to the alphabet from the Greeks was the addition of vowels. The Semitic alphabet was entirely consonants. The Greeks also added the letters "ph," "ps," "kh," and "x." Some letters had different sound values from our present-day sounds. "H" was *eta* and their "P" had the sound of our "R."

The Greeks developed the shapes of the letters. By the fifth century B.C., their alphabet was fully developed. It was officially adopted by Athens in 403 B.C. It was known as the Ionic alphabet. This is the alphabet of 25 letters that is used in the country of Greece today (see page 59).

Like all ancient writing, Greek writing used only capital letters. The minuscule, or small, letters were not introduced until the **Middle Ages.** There were also no spaces between words. A paragraph would read as follows:

INSPITEOFTHEGREATBEAUTYOFGREEKWRITING

TWOTHINGSMAKEITAPPEARSTRANGETOUSLIKEALL

ANCIENTWRITINGITISALLINCAPITALSWITHNO

SMALLLETTERSORPUNCTUATION

The writing tools of the Greeks included the tablet and stylus. The tablet was made of wood with a coating of wax. With the stylus, a scribe scratched the letters into the wax. This tablet was used in classrooms.

In addition to papyrus, which the Phoenicians had brought from Egypt to Greece, the Greeks used parchment for permanent documents and books. A young student scribe had discovered that pounding and rubbing the skin of a goat produced this material for writing. It had a smooth surface and absorbed ink with clarity. Homer used parchment in writing *The Trojan Wars, The Iliad,* and *The Odyssey.*

The written language of educated people until A.D. 500 was Greek.

Can you figure out what this says?

VERYEARLYINTHEHISTORYOFGREEKWRITING

OTTFELMORFENILENOETORWSKEERGEHT

RIGHTANDTHENEXTLINEFROMRIGHTTO

ETARAPESOTSECAPSESUTONDIDYEHTTFEL

WORDSTHEYOFTENOMITTEDVOWELSINWRITING

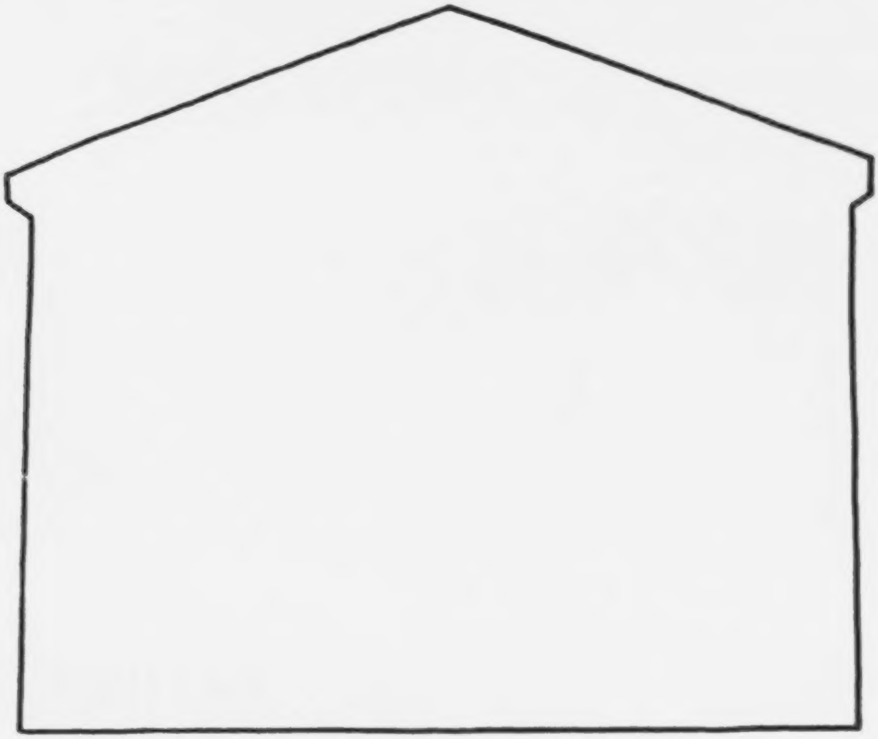
THSLNHSNVWLSCNYSPPLYTHMNDBRKTHSCD

Vocabulary

epigraphers
democracy
politics
philosophy
introspective
Middle Ages

GREEK CLASSICAL ALPHABET — 25 LETTERS

Α	**alpha**
Β	**beta**
Γ	**gamma**
Δ	**delta**
Ε	**epsilon**
Ϝ	**digamma**
Ζ	**zeta**
Η	**eta**
Θ	**theta**
Ι	**iota**
Κ	**kappa**
Λ	**lambda**
Μ	**mu**
Ν	**nu**
Ξ	**ksi**
Ο	**omicron**
Π	**pi**
Ρ	**rho**
Σ	**sigma**
Τ	**tau**
Υ	**upsilon**
Φ	**phi**
Χ	**chi**
Ψ	**psi**
Ω	**omega**



ACTIVITIES

THE GREEKS
Knowledge—When did the alphabet take root in Greece? When was it officially adopted by Athens? Make a timeline that shows these events and five others of the same era.

THE GREEKS
Knowledge—Develop a 10-card fact file about the Greek alphabet.

THE GREEKS
Comprehension—Define these terms: boustrophedon, Phoenician, parchment, philosopher, city-state. Use the words in a short essay about Greece.

THE GREEKS
Comprehension—Make a mobile that illustrates at least five contributions Greek civilization made to the world.

THE GREEKS
Application—Use boustrophedon to copy a paragraph. Display the paragraph in an attractive way and include at least three reasons why you believe boustrophedon is not a modern practice.

THE GREEKS
Application—Trace the origin and evolution of each letter in your first and last names. Make a mobile that spells your name and displays the information about the letters.

THE GREEKS
Analysis—Compare and contrast our alphabet with that of the Greeks. Make a large chart that shows the letters that are the same, those that are similar, and those that are different. Include an explanation of why the similarities and differences exist.

THE GREEKS
Analysis—Note the changes and modifications in the alphabet from the Phoenicians to the Greeks. Prepare a chart that illustrates and explains the reasons for the changes and modifications.

THE GREEKS
Synthesis—With a friend or friends, develop and present a play about Ancient Greece that will teach viewers at least 10 things about the Greek culture.

THE GREEKS
Synthesis—Read at least three Greek myths. Then create a myth in the Greek style. Write your myth, using new or old gods and goddesses as characters in the myth.

THE GREEKS
Evaluation—How important was the discovery of parchment to the development of the alphabet? Based on information from at least three sources, prepare an oral presentation designed to convince the class of the accuracy of your evaluation (from 1 to 10) of the importance of the role of parchment.

THE GREEKS
Evaluation—Evaluate the contributions of the Greeks: architecture, government, philosophy, and literature. Rank these according to their importance to the modern world. Provide an example of each contribution and an explanation of why you ranked them as you did. Make an oral or written presentation to share your work.

BIBLIOGRAPHY

UPPER ELEMENTARY LEVEL

Bowa, Sir Cecil. *Greek Experience*. World Publishers.

Enz, Judith and Tanner, Joey. *Ancient Greece and Rome* (Zephyr Press Learning Packet). Tucson, AZ: Zephyr Press, 1983.

Glubok, Shirley and Tamarin, Alfred. *Olympic Games in Ancient Greece*. New York: Harper & Row Pubs., Inc.

Holden, David. *Greece without Columns*. New York: J. B. Lippincott Co.

Kuhn, Martha and Case, Marilyn. *Greece: The Hellenic Age*. St. Louis, MO: Milliken Publishing Co.

ADULT LEVEL

A Coloring Book of Ancient Greece. Santa Barbara, CA: Bellerophon Books. (All levels)

Asimov, Issac. *Greeks: A Great Adventure*. Boston, MA: Houghton Mifflin Co.

Cullum, Albert. *Greek Tears and Roman Laughter*. New York: Scholastic Book Services, Citation Press.

A B C D E F

Z G

Y H

THE ROMANS

X I

POPVLVSQVEROMANVS
VESPASIANO AVGVSTO

W J

V K

U L

T M

S R Q P O N

There is an old saying, "All roads lead to Rome." And this is where our history of the alphabet takes us. An **Indo-European** people, the Latins settled in an area of Italy known as Latium. These people were the ancestors of the Romans. Here, in 753 B.C. on seven hills, they built the city of **Rome**. To the north was a land known as Etruria, where the Etruscan people settled. This area is now called Tuscany. The Etruscans had great influence over the Romans. Their well-trained army conquered the Romans and ruled the country for several hundred years. One of their important deeds was to teach the Romans to write. Although the origin of the Etruscan people remains a mystery, the alphabet they used was similar to that used by the Phoenicians and Greeks.

The Romans finally conquered the Etruscans in the fourth century B.C. However, the Etruscan technique of writing remained. The Romans slowly improved the appearance of the letters and began making other changes.

A **republic** was established by the Romans because the people did not want to be ruled by a king. But this system of government did not work. There were civil wars. Then in 49 B.C. a great Roman general named Julius Caesar ended the wars and brought peace to the country. His nephew, Octavian, soon became the ruler of Rome. He was called Augustus I, Emperor. Augustus restored confidence in the republican form of government. This marked the beginning of the famous Roman Empire.

There were 26 letters in the original Etruscan alphabet. Twenty-one letters were adopted by the Romans. They used four letters to represent numbers. C became 100, M became 1,000, D became 500, and L became 50. Do you recognize the Roman numerals? As the Romans became aware of the alphabet used by the Greeks, they adopted letters from the Greek alphabet. They used the following letters: A, B, C (with the sound of "k"), D, E, F, H, I, K, L, M, N, O, Q, P (which was the original shape of "R"), S, T, V, X. The letter "Z," which was the seventh letter in the Greek alphabet, was omitted. The Romans didn't use this sound in Latin. Instead, they placed "G" in its position. However, in the first century B.C., after the conquest of Greece, Greek words such as *zephyros* appeared. The Romans added the "Y" and "Z" to the end of their alphabet. During the Middle Ages the letters "U," "W," and "J" appeared. "U" and "W" developed from the letter "V."

The beauty of the letters was another contribution by the Romans. Curves and graceful shapes evolved. The strokes had different thicknesses. The Romans developed their alphabet through writing and not through drawing. They also introduced the cursive form of writing.

With the great achievements of each emperor as the Roman army conquered more and more of the world, **triumphal** archways and columns were constructed. These monuments were engraved with inscriptions and relief carvings. The tool that was used was a **chisel**, for carving on stone.

The Romans also wrote on papyrus, parchment, and vellum. Vellum was a very fine form of parchment made from the skins of lamb, kid, or antelope. For documents that they wished to retain, the Romans wrote on parchment. Scribes began to use metal pens. As they wrote on parchment with the metal pens, they wrote the letters smaller and closer together. One letter flowed into the next. This was the foundation of our cursive writing.

A new style of letters began to appear on the carved inscriptions. The Romans added serifs. Serifs are small, finishing strokes on letters. These strokes were very appealing to the eye.

From the fourth century to the eighth, the mode of writing known as uncial became prominent. In uncial writing letters extended above and below the writing line. This was the foundation for small letters.

One variety of the Latin alphabet was the monumental script, which derived its name from being used for inscriptions on monuments. It was also known as lapidary and was engraved on stone. Another variety was the capital script, which had three types. These were the lapidary capitals, the book capitals, and the rustic capitals.

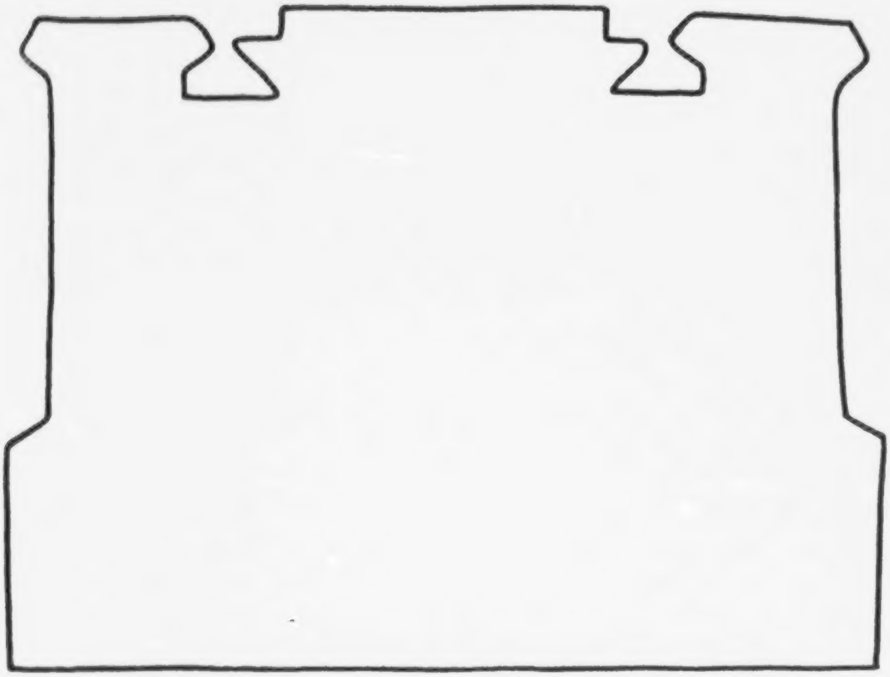
The Latin alphabet was adopted by most of the European people. The powerful Roman legions spread the alphabet and the Latin language throughout Europe. Italy, Spain, Portugal, and France are some of the countries that adopted the Latin alphabet.

Over the centuries many modifications have been made to the English alphabet. Rather than add new letters, we have used letters to represent two or more sounds. For example, the letter "c" as used in "cut" differs from that used in "cereal." Our vowels "a, e, i, o, u" are pronounced in various ways in different parts of the country. You will find this to be true in England as well as in the United States.

Writing is an art. It is **aesthetic**. The history of the development of our alphabet has provided an experience that is rich in artistry and steeped with the culture of many civilizations. What makes it even more interesting is that there still remains a mystique about some periods of the development of these letters. Now that your interest has been piqued, you'll find lots of information available that hasn't been covered in these chapters. Have fun discovering it!

Vocabulary

Indo-European
Rome
republic
triumphal
chisel
aesthetic



ACTIVITIES

THE ROMANS
Knowledge—What was the "Age of Pericles"? Learn 10 facts about the Age of Pericles and share them with the class.

THE ROMANS
Knowledge—Our alphabet was adopted from the Romans. The Roman alphabet had 21 letters with X at the end. What letters did we add? Make a poster that illustrates the Roman alphabet as well as ours.

THE ROMANS
Comprehension—Define these words: patrician, plebeian, tribune, republic, senate, parchment, serifs, vellum, uncials. Write a short essay about Rome that includes at least six of these words.

THE ROMANS
Comprehension—Make a small, illustrated book about the changes the Romans made in the alphabet. Share this book with the class.

THE ROMANS
Application—Alone or with friends, make a mural-timeline that illustrates historical events and the development of writing from the founding of Rome until the fall of the Roman Empire.

THE ROMANS
Application—Demonstrate for the class at least four historical forms of writing, including cursive. Provide information about the country of origin for each form.

THE ROMANS
Analysis—Compare the Greek and Roman cultures by choosing at least three aspects (e.g., art, poetry, literature, architecture, mythology) including their alphabets. Find an effective way to present this information and the reasons for the similarities and differences.

THE ROMANS
Analysis—The Roman alphabet had only capital letters. How were the lower-case letters developed? Make a chart that examines the advantages and disadvantages of using only capital letters and of using both upper- and lower-case letters.

THE ROMANS
Synthesis—What if we (the Western world) had not accepted the Roman alphabet? Write a "what if" story using this as a central theme. Include in your story the reasons for the "what if" events and phenomena you describe.

THE ROMANS
Synthesis—Use at least three sources to learn about the life of a Roman scribe. Based on what you learn, dramatize a day in the life of a scribe.

THE ROMANS
Evaluation—Develop at least five criteria by which to evaluate the efficiency and effectiveness of our alphabet for the 21st century. Rate the alphabet on each criterion and suggest changes or modifications to remedy weaknesses you detect. Find a way to share your evaluation with the class.

THE ROMANS
Evaluation—How important is the geographical location of a country in relationship to its culture and power? Using a specific country as an example, develop a written or oral report that establishes and explains the importance of location.

BIBLIOGRAPHY

UPPER ELEMENTARY

A Coloring Book of Rome. Santa Barbara, CA: Bellerophon Books.

Amery, Heather and Vanage, Patricia. *The Time Traveller: Rome and Romans.* Usborne/ Hayes.

Bouquet, A. C. *Everyday Life in New Testament Times.* Carousel Books.

Enz, Judith and Tanner, Joey. *Ancient Greece and Rome* (Zephyr Press Learning Packet). Tucson, AZ: Zephyr Press, 1983.

Fenton, Sophia Harvati. *A Book to Begin on Ancient Rome.* New York: Holt, Rinehart & Winston Co.

Fenton, Sophia Harvati. *Ancient Rome.* New York: Holt, Rinehart & Winston Co.

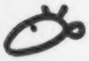
Greig, Clarence. *Great Civilizations.* Ladybird Books, Ltd.

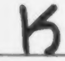
Greig, Clarence. *Rome.* Ladybird Books, Ltd.

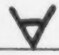
Muccini, Peter. *Julius Caesar.* New York: McGraw-Hill Book Co.

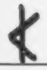
ORIGIN OF EACH LETTER

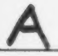
Aa

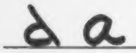

1. This letter probably started as a picture sign of an oxhead. It was used in early Semitic writing about 1500 B.C.


2. In about 1000 B.C. the sign was given a linear form.

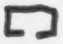

3. In the Semitic languages this sign was called *aleph*. This translated meant "ox." It is possible that *aleph* came from the Egyptian character for *apis*, the sacred bull.

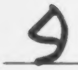

4. The Greeks, having no use for the *aleph* sound, changed its name to *alpha* and used the sign for the vowel "a."

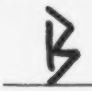

5. The Romans modified this sign into Latin and it became the source of the English form.

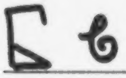

6. Further modification, including the addition of the circular shape and projection, gave us the present small "a."

Bb


1. The letter "B" most likely began as a pictograph designating a house; from the Hebrew about 1500 B.C.

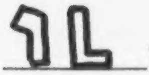

2. In Byblos about 1000 B.C., the sign took on a linear or geometric form.

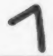
 3. This shape came from the Hebrew. It was called *beth*, meaning "house." The Greeks called this letter *beta*. They turned it around when they started to write from left to right.

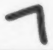
 4. From the Greeks, the Romans took this form into Latin. From the Latin, it evolved into English.

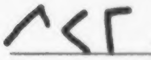
b 5. Scribes omitted the upper loop. The letter had its present form by the 9th century.

Cc

 1. The origins of the letter "C" may be found in early Semitic writing about 1500 B.C. on the Sinai Peninsula.

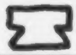
 2. The sign changed to a linear form in Byblos around 1000 B.C.

 3. This sign is called *gimel* from the Semitic. It translates into "throwing stick."

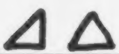
 4. The Greeks reversed the letter as they began to write from left to right. They changed the name to *gamma* with the sound of "g."

C 5. The Latin alphabet rounded this sign. The original form was used for the sound of "k."

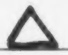
Dd



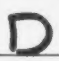
1. This is the linear form of the letter "D" used in Byblos about 1000 B.C.



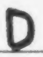
2. The triangle translated into *daleth,* which meant "door."



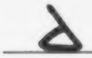
3. The Greeks changed the semitic name to *delta.*



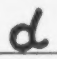
4. In Western Greek scripts, the triangle was turned to its side.



5. The rounded form was used in Latin writing.

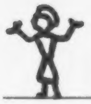


6. Greeks used this sign.

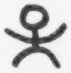


7. Romans modified the triangle.

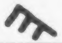
Ee



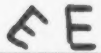
1. It is presumed that this letter started as a picture of a man holding his arms upward.



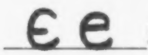
2. In Byblos about 1000 B.C. this sign meant "rejoicing."



3. The sign was given a linear form and called "he," standing for the "h" sound in English.



4. The Greeks reversed the sign for ease in writing from left to right.



5. The Romans adopted this sign for the capital "E" and the printed small "e."

Ff

Y 1. The Romans used this letter for their consonant. Several forms of this new sign were used in Italy.

F 2. The letter remained unchanged into English.

ꝼ 3. The small "f" took form in early medieval times. In the 5th century, scribes used a continuous curving stroke.

f 4. The English printed small "f" came from a 9th-century version.

Gg

7 1. A descendant of the letter "C," this sign was given a linear form in Byblos about 1000 B.C.

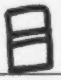
^ < 2. The Greeks changed the name of the letter from *gaml* to *gamma*. They reversed the letter when they began to write from left to right.

C 3. The Romans rounded the letter. It was used for the sounds "g" and "k."

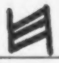
G 4. To differentiate between the two sounds in writing, "C" plus a bar was then used for the sound "g."

g 5. The small letter had a loop added at the bottom.

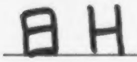
Hh



1. The letter "H" possibly started as a picture sign of a fence in early Semitic writing about 1500 B.C.

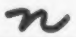


2. A linear form took place in Byblos in 1000 B.C. The sign was known as *heth*.



3. The Greeks turned this into a vowel, *eta* (long "e").

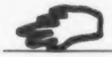
H 4. The Romans took this as the form.



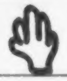
5. From the capital letter, curves were added for the small *eta*.

h 6. In the 9th century it acquired its present appearance.

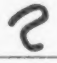
Ii



1. The letter "I" in early Semitic writing was possibly a picture sign of a hand.



2. It was given a linear form about 1000 B.C. in Byblos. The sign was called *yoah* or "hand."



3. The Greeks renamed the sign *iota*.

I i 4. The dot was added in medieval days to the small letter.

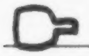
Jj

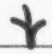
i 1. The letter "J" came into existence in the Middle Ages. It was introduced to distinguish between the Latin writing of the consonant "i" and the vowel "i."

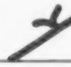
j 2. Scribes began to use a tailed form of "i," with or without the dot.

J 3. In the 17th century the distinction between "j" as a consonant, not a vowel, was established.

Kk

 1. It is thought that the letter "K" was a picture sign of the palm of the hand.

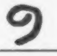
 2. The sign was given a linear form about 1000 B.C. in Byblos.

 3. In the Semitic languages the sign was called *kaph*, meaning palm.

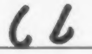
K 4. The name was changed to *kappa* by the Greeks. It was reversed to adapt to the left-to-right direction of their writing.

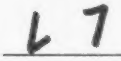
K 5. The Romans made few changes, and our capital letter "K" came into English unchanged.

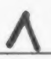
Ll

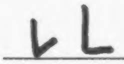
 1. It is believed that the letter "L" began as the sign of an oxgoad, or stick.

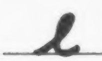
2. In early Egyptian writing, it appeared as a peasant's crook.

 3. About 1000 B.C. in Byblos, the sign was given a linear form. In Semitic languages the sign was called *lameah,* meaning "oxgoad."

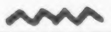
 4. The Greeks renamed it *lambda.*

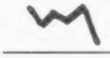
 5. This is the early Roman version.

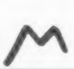
 6. From the Latin the capital remained unchanged into English.

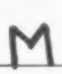
 7. The small "l" was rounded and a loop was added.

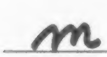
Mm

 1. The letter "M" possibly started as a picture word for water.

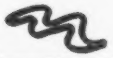
 2. It was given a linear form with a tail in 1000 B.C. The sign was called *mem,* meaning "water" in the Semitic language.

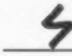
 3. The Greeks called the sign *mu.* They made it symmetrical, omitting the tail.

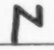
 4. From the Latin the sign came unchanged into English.

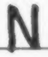
 5. The small "m" has curves added.

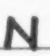
Nn


1. The letter "N" started as a picture sign of a snake.


2. About 1000 B.C. the sign was given a linear form. The sign was called *nahas,* meaning "snake" or *nun,* meaning "fish."

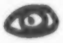

3. The Greeks changed the name to *nu* and reversed the direction of the letter.

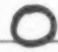

4. The Greeks made the strokes of equal lengths.


5. From Latin the capital letter came into English.

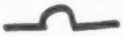
6. The small "n" is made with curves.

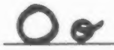
Oo


1. The letter "O" is presumed to have started as a picture sign of an eye in Egyptian hieroglyphics.

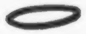

2. Around 1000 B.C. the sign was given a circular form. It was called *ayin,* meaning "eye."

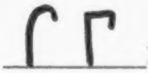
3. The Greeks didn't use this sound. So they made it a vowel. They called it *omicron,* meaning "short o."

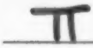

4. This is the sign *omega,* meaning "long o." The Greeks placed this sign at the end of their alphabet.

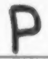

5. The Romans formed an oval, which we adopted. The capital "O" differs from the small "o" only by size.

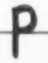
Pp

1. The origin of the letter "P" is uncertain. In the Semitic language the sign was called *pe,* meaning "mouth."

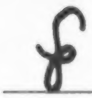
2. Then the Greeks changed this to *pi* and turned the letter around.

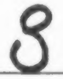
3. The Greeks lengthened the right side to give the form symmetry.

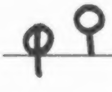
4. The Romans curved the form into a loop.

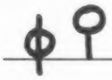
5. The small "p" is a replica of the capital.

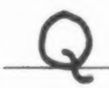
Qq

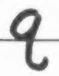
1. The origin of the letter "Q" is uncertain; however, there was a looped rope sign in Egyptian hieroglyphic writing.

2. The sign of a double loop was discovered about 1500 B.C.

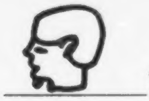
3. The "Q" sign was developed about 1000 B.C. in Byblos. This sign, *goph,* means "monkey" in the Semitic languages.

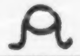
4. The Greeks renamed the sign *koppa,* which actually was the same sound as *kappa.*

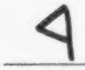
5. The Romans gave the sign a round form with a curved tail.

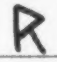
6. The small "q" has the tail developed into a vertical line.

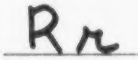
Rr


1. The letter "R" possibly started as a picture sign of a human head.

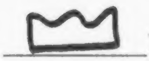

2. In about 1000 B.C. the sign was given a linear form and called *resh,* meaning "head."

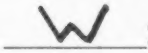

3. The Greeks changed the name to *rho.*

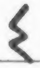

4. They turned the sign around, adding a slight tail.

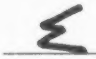

5. The Romans made it look this way.

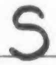
Ss

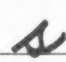

1. The letter "S" may have its origins in a pictograph of a sandy hill or peak or a rock.


2. The sign was given a linear form about 1000 B.C. in Byblos and called *shin,* meaning "tooth."


3. The Greeks formed the sign vertically.


4. Soon it became more symmetrical and was named *sigma.*


5. The Romans rounded the form, omitting the bottom stroke.


6. The small "s" is a variant of the capital.

Tt

X 1. It is believed that the letter "T" started as a brand or a mark.

+ 2. This was the early Semitic sign.

† ✗ 3. These signs were given the name *taw*, meaning "mark," by the Greeks. They named the sign *tau*.

T 4. The Greeks changed its form with the elimination of the top of the upright stroke.

t 5. The Romans took this into Latin and it came unchanged into English. The small letter is written with curves.

Uu

Y 1. The letter "U" is derived from the letter "V" and related to "Y," "F," and "W."

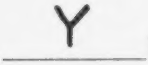
V 2. This sign was used by the Romans for three sounds (u, v, w).

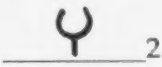
U 3. Latin scribes rounded the small letter.

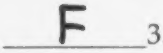
V u 4. In the Middle Ages, "V" became the consonant form and "U" the vocalic form. The change was completed by adding small "v" and capital "V" to their writing.

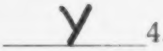
U u 5. These forms came unchanged into English.

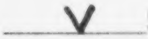
Vv


1. The letter "V" started as a picture of a pole in Egyptian writing.

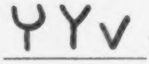

2. The top part was curved about 1000 B.C.

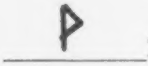

3. One Greek form of this sign was called *digamma* for the consonant "w." This form became the Latin sign "F."

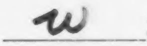

4. The other Greek form was *upsilon*. It was used for "u."

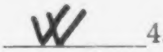

5. The Romans modified the sign by omitting the bottom tail.

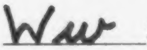
Ww


1. The origin of the letter "W" is related to that of the letter "V."

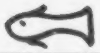

2. Until 1066 there was no such letter. Instead, the letter "V" was used for the sounds "v" and "w."

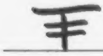

3. The Anglo-Saxons developed a letter for the sound of "w," calling it *wen*.

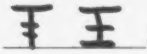

4. The Anglo-Saxons used a double "v" for the "w" sound.

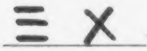

5. Two of the old pointed capital letters were gradually linked together.

Xx

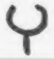

1. The letter "X" most likely started as a pictograph of a fish.

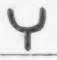

2. In 1000 B.C. the sign was given a linear form and called *samekh,* meaning "fish."

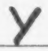

3. The Greeks renamed the sign *xi (ksee).*

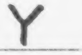

4. The Latin form was modified into a form almost identical to the modern capital letter "X."

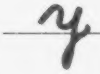
Yy


1. The letter "Y" is a descendant of the letter "V."


2. This was the sign used by the Phoenicians.

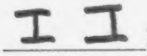

3. The Greeks adapted this sign to the form of the *upsilon* sign.


4. The Romans and English did not change the sign.

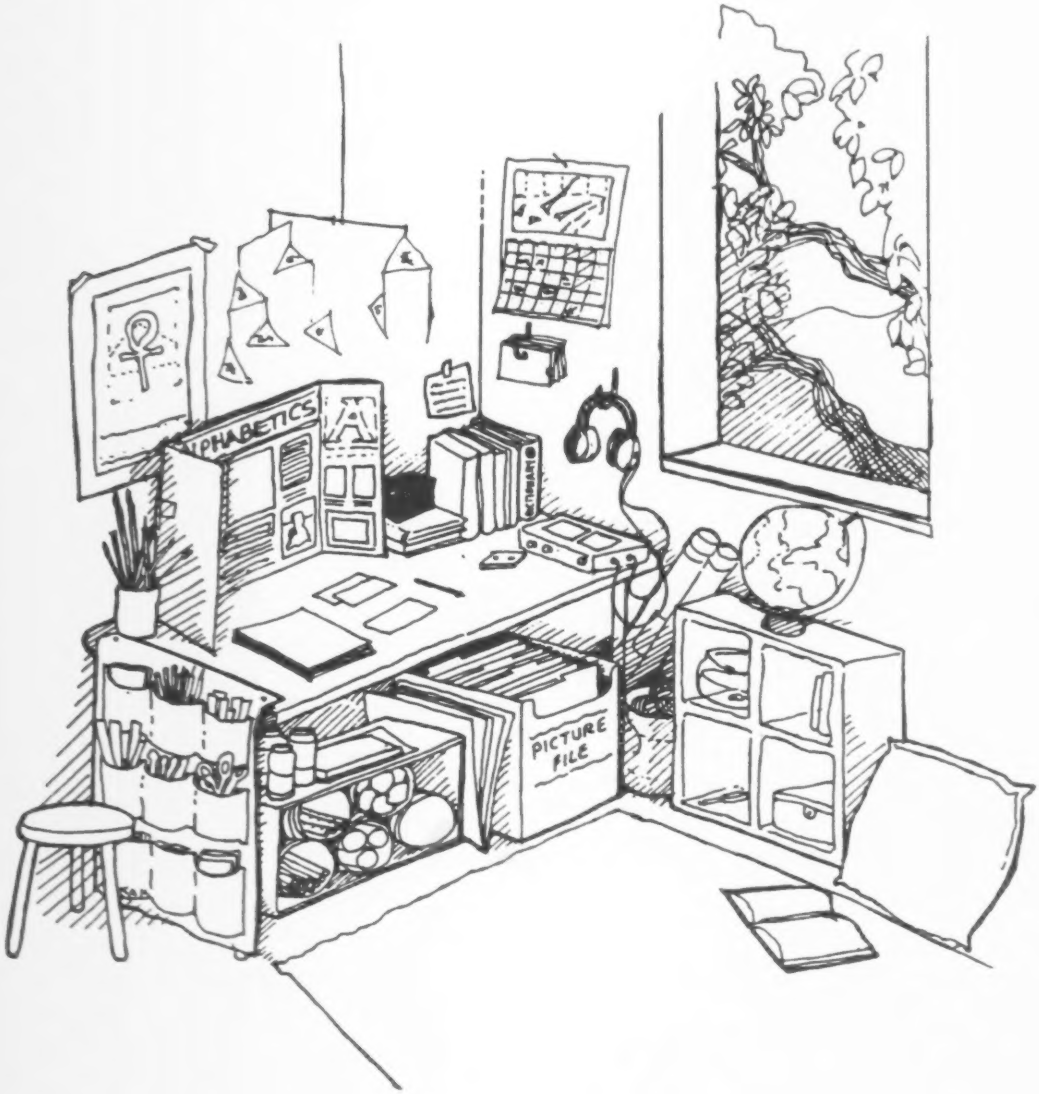

5. The small written form is a variant of the capital.

Zz

______ 1. The origin of the letter "Z" is uncertain. However, it is believed to have developed from a sign called *zayin*, meaning "weapon."


______ 2. The Greeks changed the name to *zeta*. The sign was used by them in several forms.

______ 3. The capital letter came unchanged from one of the Greek forms into the English.


LPHABETICS
A
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CREATING A LEARNING CENTER

GLOSSARY

a

aesthetic: having to do with beauty

anthropologists: scientists who study the origin and culture of man

archeology: study of history through excavated discoveries

archeologist: scientist who studies archeology

arduous: involving difficulty; requiring great labor

avaricious: greedy

b

basalt: dark, volcanic rock

boustrophedon: ancient method of writing from right to left, then left to right, alternating each line, as the oxen ploughs

c

Canaanites: people who lived in Canaan, a land between Jordan and the Mediterranean Sea

character: English term for a Chinese word

chisel: a cutting tool for engraving on metal, stone, or wood

civil service: the administrative service of a government

commemoration: to celebrate or remember by a special event

Coptic: an ancient language of the Egyptians

coronation: a ceremony for crowning a monarch

cumbersome: unwieldy, burdensome

cuneiform: wedge-shaped inscriptions

curio: a rare object

cursive: running, flowing writing where the letters are joined

cylinder: a tube-shaped object or container used as a seal

d

Dead Sea: a salt lake on the Israel-Jordan border where parchment scrolls were found

decipherment: translation into plain text

decree: a formal order or a law

democracy: a form of government with power exercised by the people

demotic: simplified form of the hieratic writing; pertaining to the people

diversified: varied

e

epigraphers: interpreters of inscriptions

f

fertile: capable of sustaining abundant growth

h

hamlet: small village

Han: a dynasty in China characterized by centralized control, a revival of learning, and the influence of Buddhism

hieroglyphics: pictures and/or symbols representing sounds, ideas, or objects

Homer: Greek epic poet of the 9th century B.C.

Homo sapiens: scientific name for modern man

i

ideograph: a pictorial symbol of an object or concept

incise: to cut into with a sharp instrument

indestructible: tough and durable

Indo-European: referring to a family of languages spoken in most of Europe and in the parts of the world colonized by the Europeans after 1500, as well as those spoken in Persia, India, and some other parts of Asia.

introspective: self-examining

l

linguistic: pertaining to language

m

mallet: a hammer having a wood head

Middle Ages: a period of European history from about A.D. 500 to about 1500

millennium: a period of a thousand years (plural: *millennia*)

moot: debatable; arguable

o

ochre: a pigment of dark yellow color

p

Paleolithic: period of history of the prehistoric people and cave paintings

paleontologists: scientists who study fossils

papyrus: a type of writing paper made by the ancient Egyptians from a plant of the same name

philosophy: science of human values

pith: soft, spongy tissue in the center of some plants

politics: concerned with the activities of government

pyramid: an ancient massive structure with a square base and triangular sides, used for the burial of important people and kings

r

rebus-writing: words or syllables represented by pictures or objects whose names sound like the words or syllables. For example, " ♥ U."

republic: system of government in which sovereignty belongs to the people

Rome: the capital city of Italy

s

scribe: one who writes or copies manuscripts

Semites: people that originally included the Babylonians and Phoenicians

Sinai: a peninsula between the Mediterranean Sea and the Red Sea

speculation: thinking

stylus: an ancient writing instrument with one pointed end

syllabic: pertaining to a syllable

t

translucent: clear, transparent

triumphal: pertaining to a victory

u

uniconsonantal: having one consonant

GENERAL RESOURCES FOR TEACHERS

A Medieval Alphabet. Santa Barbara, CA: Bellerophon Books (coloring book).

Cappelluti, A. *The Human Adventure*. California State Series, 1973.

Carey, David. *The Story of Printing*. Ladybird Books, Ltd.

Ceram, C. W. *Gods, Graves and Scholars*. New York: Bantam Books, Inc.

Cottrell, Leonard. *Reading the Past*. New York: Macmillan Publishing Co., Inc. (Crowell-Collier Press).

Fairbanks, Alfred. *A Book of Scripts*. New York: Penguin Books, Inc.

Folsom, Franklin. *The Language Book*. New York: Grossett & Dunlap, Inc.

Gelb, I. J. *A Study of Writing*. Chicago, IL: University of Chicago Press.

Gourdie, Tom. *Puffin Book of Handwriting*. New York: Penguin Books, Inc. (Puffin).

Klager, Max. *Teaching Alphabets Through Art*. New York: Van Nostrand Reinhold Co.

Koch, Rudolf. *The Book of Signs*. New York: Dover Pubns., Inc.

McLuhan, Marshall. *The Gutenberg Galaxy*. Toronto: University of Toronto Press.

Ogg, Oscar. *The 26 Letters*. New York: Thomas Y. Crowell Co.

Shahn, Ben. *The Alphabet of Creation*. New York: Schocken Books, Inc.

GENERAL RESOURCES FOR STUDENTS

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Oran, Saudie. *How Writing Began*. MacDonald Educational.

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Cottrell, Leonard. *Reading the Past*. New York: Macmillan Publishing Co., Inc. (Crowell-Collier Press).

Dugan, William. *How Our Alphabet Grew*. New York: Western Publishing Co., Inc. (Golden Press).

Editors of Children Press. *Codes & Mystery Messages*. Watertower Books.

Fairbanks, Alfred. *A Book of Scripts*. New York: Penguin Books, Inc.

Fisher, Leonard Everett. *Alphabet Art*. Locust Valley, NY: Four Winds Press, 1978.

Folsom, Franklin. *The Language Book*. New York: Grossett & Dunlap, Inc.

Gelb, I. J. *A Study of Writing*. Chicago, IL: University of Chicago Press.

Gourdie, Tom. *The Puffin Book of Handwriting*. New York: Penguin Books, Inc. (Puffin Books).

Kay, Shirley. *Digging into the Past*. New York: Penguin Books, Inc. (Puffin Books).

Koch, Rudolf. *The Book of Signs*. New York: Dover Pubns., Inc.

Lundovici, James L. *Origins of Language*. New York: G. P. Putnam's Sons.

Miller, Albert G. *Where Did That Word Come From?* Los Angeles, CA: Bowmar/Noble Pubs., Inc.

Nurnberg, Maxwell. *Fun with Words*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Ogg, Oscar. *The 26 Letters*. New York: Thomas Y. Crowell Co.

Porell, Bruce. *Digging the Past*. Reading, MA: Addison-Wesley Publishing Co., Inc.

Rogers, Frances. *Painted Rock to Printed Page*. New York: J. B. Lippincott Company.

Shahn, Ben. *The Alphabet of Creation*. New York: Schocken Books, Inc.

ADULT LEVEL

Hunter, Norman (compiled by). *Professor Branestawm's Dictionary*. New York: Penguin Books, Inc. (Puffin Books). (All levels)

McLuhan, Marshall. *The Gutenberg Galaxy*. Toronto: University of Toronto Press.

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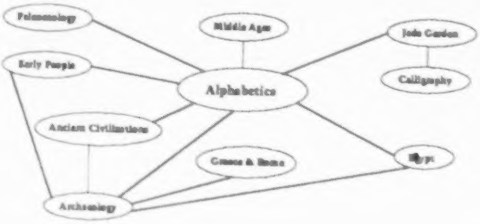

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